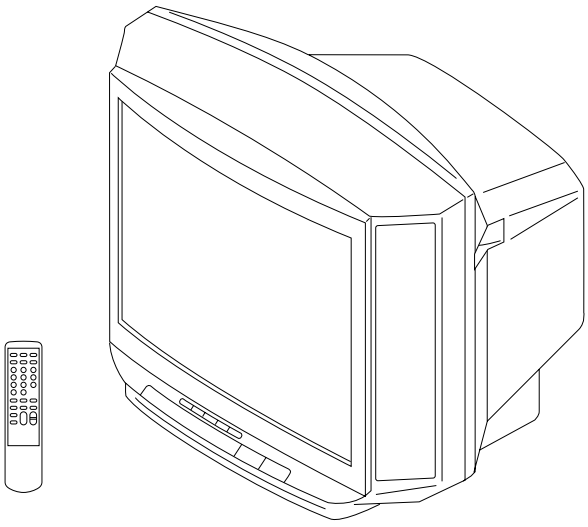
SERVICE MANUAL BG-1S (D) CHASSIS

MODEL	COMMANDER	DEST.	CHASSIS NO.
KV-J21MF1AK	RM-883	India	SCC-K67K-A
KV-J21MF3	RM-883	India	SCC-K76F-A
KV-J21MN1AK	RM-883	India	SCC-K67L-A
KV-J21PF1	RM-883	India	SCC-K67G-A

MODEL	COMMANDER	DEST.	CHASSIS NO.



MICROFILM

TRINITRON® COLOR TV

SONY®

SPECIFICATIONS

		Note
Power requirements	110-240 V AC, 50/60 Hz	
Power consumption (W)	Indicated on the rear of the TV	
Television system	B/G, I, D/K, M	Except for KV-J21PF1
	B/G	KV-J21PF1
Color system	PAL, PAL 60, SECAM, NTSC4.43, NTSC3.58	Except for KV-J21PF1
	PAL, PAL 60,NTSC4.43, NTSC3.58 (AV IN)	KV-J21PF1
Stereo system	NICAM Stereo B/G, I; A2 Stereo (German) B/G	KV-J21MN1AK only
Channel coverage		
B/G	VHF: E2 to E12/UHF: E21 to E69/CATV: S01 to S03, S1 to S41	
I	UHF: B21 to B68/CATV: S01 to S03, S1 to S41	Except for KV-J21PF1
D/K	VHF: C1 to C12, R1 to R12/UHF: C13 to C57, R21 to R60/ CATV: S01 to S03, S1 to S41, Z1 to Z39	Except for KV-J21PF1
M	VHF: A2 to A13/UHF: A14 to A79/ CATV: A-8 to A-2, A to W+ 4, W+ 6 to W+ 84	Except for KV-J21PF1
Audio output (speaker)	3W + 3W	KV-J21MF3/J21PF1
	3W + 3W + 7W (3D WOOFER)	KV-J21MF1AK/J21MN1AK
Inputs	Antenna: 75 ohms	
	VIDEO IN jacks: phono jacks Video: 1 Vp-p, 75 ohms Audio: 500 mVrms, high impedance	
Outputs	Headphone jack: minijack	
	MONITOR OUT jacks: phono jacks Video: 1 Vp-p, 75 ohms Audio: 500 mVrms	
Picture tube	21 in.	
Tube size (cm)	54	Measured diagonally
Screen size (cm)	51	Measured diagonally
Dimensions (w/h/d, mm)	610 × 470 × 488	KV-J21MF3/J21PF1
	610 × 510 × 488	KV-J21MF1AK/J21MN1AK
Mass (kg)	23	KV-J21MF3/J21PF1
	25	KV-J21MF1AK/J21MN1AK

Design and specifications are subject to change without notice.

CAUTION

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE ANODE.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

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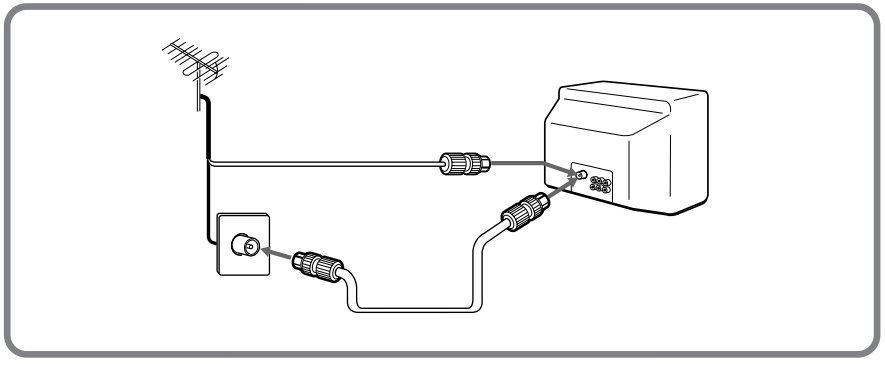
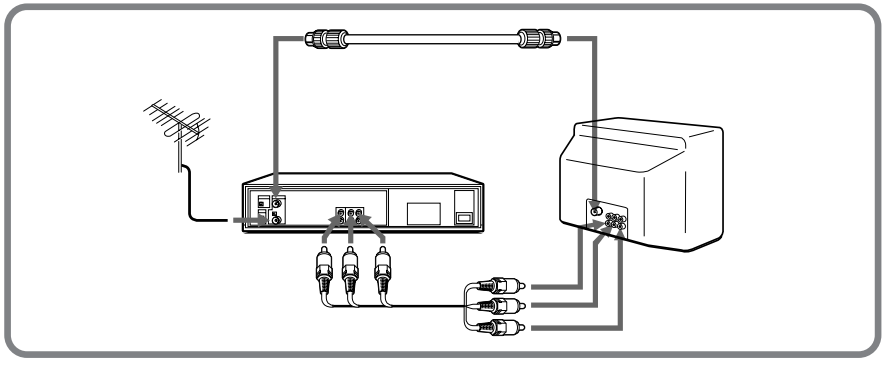
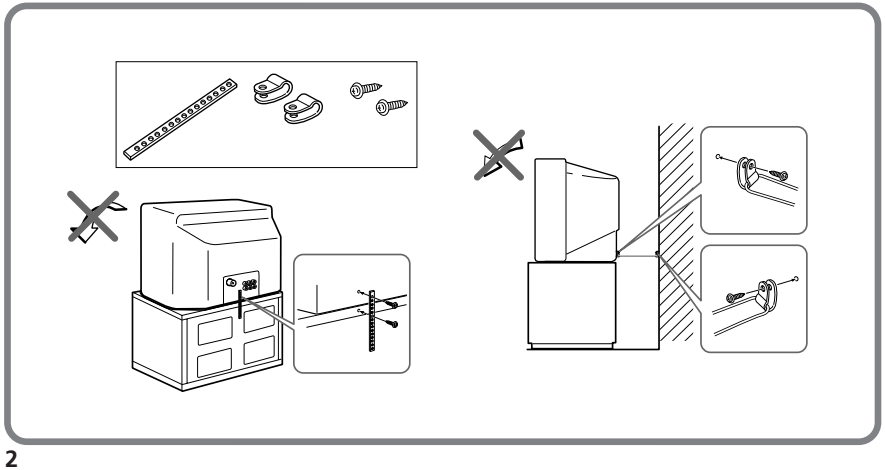
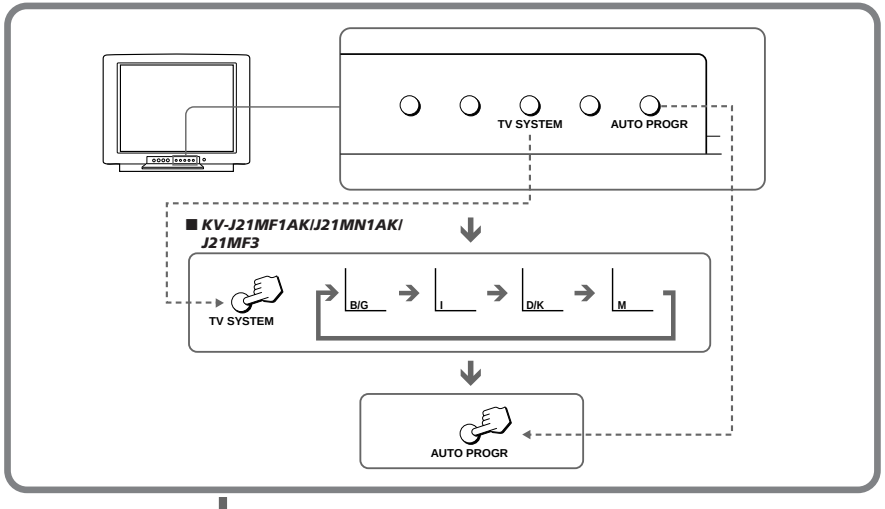
SECTION 1
GENERAL

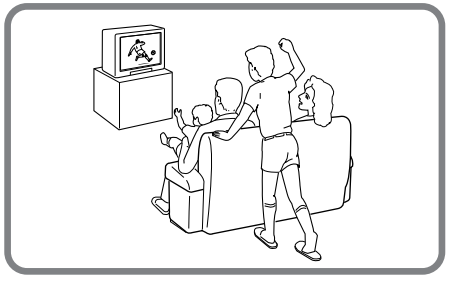
The operating instructions mentioned here are partial abstracts from the Operating Instructions Manual. The page numbers of the Operating Instruction Manual remain as in this manual.

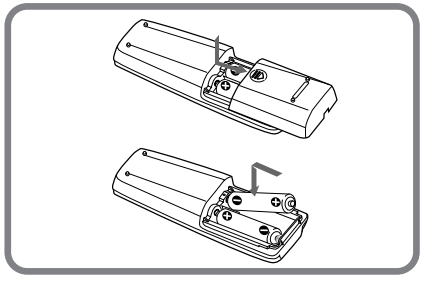


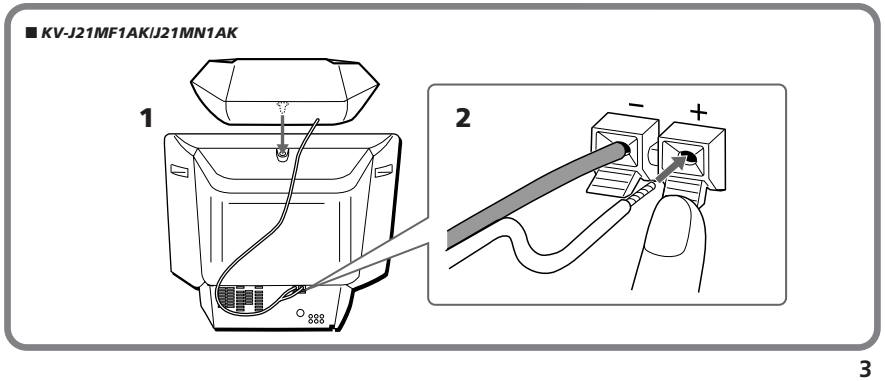








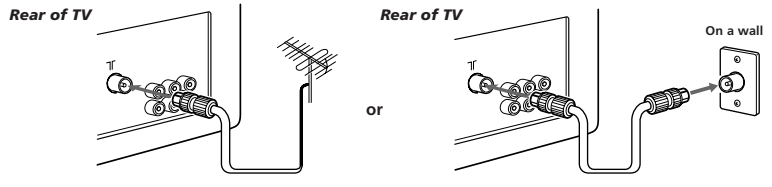




Connections

Connecting a VHF antenna or a combination VHF/UHF antenna — 75-ohm coaxial cable (round)

Attach an optional IEC antenna connector to the 75-ohm coaxial cable.
Plug the connector into the ⅂ (antenna) socket at the rear of the TV.

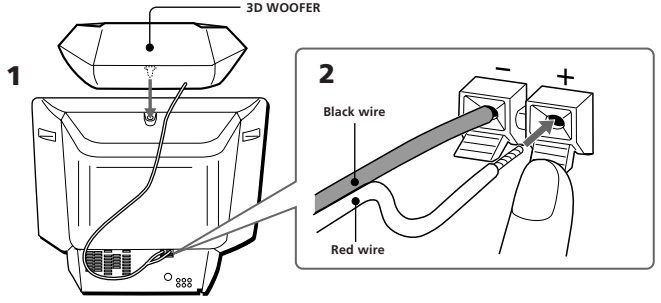


Connecting the 3D WOOFER

■ ***KV-J21MF1AK/J21MN1AK only***

1 Attach the 3D WOOFER into the foothold on the top of the TV.

2 Connect the wires to the 3D WOOFER (8Ω) terminals at the rear of the TV.
The red wire should be connected to the ⊕ red terminal and the black wire to the ⊖ black terminal.

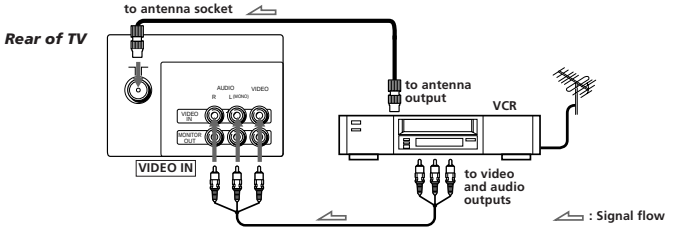


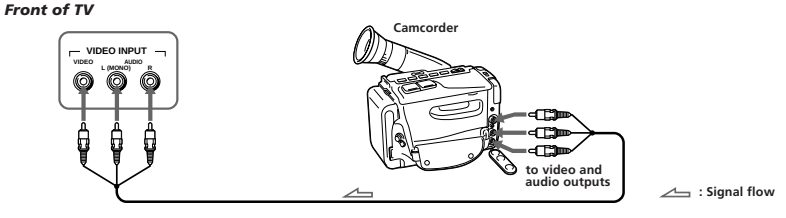
Notes
- Connect only the supplied 3D WOOFER; otherwise the TV may malfunction.
- Unplug the TV from the wall outlet when connecting the 3D WOOFER.
- To prevent a malfunction caused by a short circuit of the terminals, make sure that none of the 3D WOOFER wire strands stick out, making contact with the neighbouring speaker terminal.

Connecting optional equipment

You can connect optional audio/video equipment to your TV such as a VCR, multi disc player, camcorder, video game or stereo system.

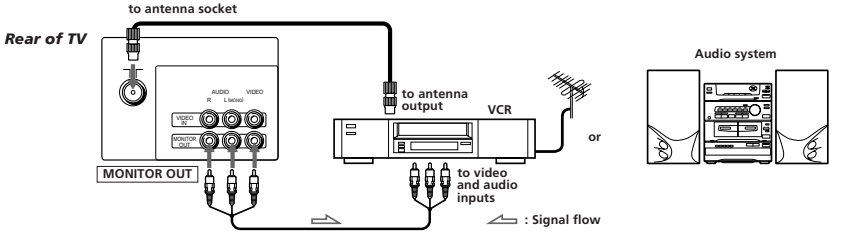
Connecting video equipment using video input jacks





When using the video input jacks
Do not connect video equipment to the video input jacks at the front and the rear of your TV simultaneously; otherwise the picture will not be displayed properly on the screen.

Connecting audio/video equipment using MONITOR OUT jacks



When recording through the MONITOR OUT jacks
If you change the channel or video input while recording with a VCR, the channel or video input you are recording also will be changed.

KV-J21MF1AK/J21MF3
KV-J21MN1AK/J21PF1
RM-883

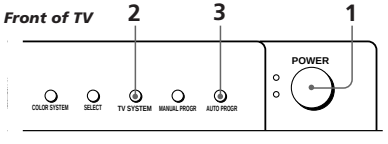
Presetting channels

You can preset up to 100 TV channels in numerical sequence from program position 1 automatically.

To change the channel for a particular program position or to receive a channel with a weak signal, you can preset the channel manually. You can also disable program position.

You can preset TV channels using the buttons on the TV or the remote commander.

Presetting channels automatically using the buttons on the TV



1 Press POWER to turn on the TV.

When the TV is turned on in standby mode, press POWER on the remote commander.

2 Press TV SYSTEM until your local TV system appears (KV-J21MF1AK/J21MN1AK/J21MF3 only)

3 Press AUTO PROGR.

To start presetting channels automatically from the specified program position

1 Press MANUAL PROGR.
2 Press TV SYSTEM to select your local TV system (KV-J21MF1AK/J21MN1AK/J21MF3 only).
3 Press PROGR +/– to select the program position.
4 Press AUTO PROGR.

Presetting channels manually using the buttons on the TV

1 Press MANUAL PROGR.

2 Press PROGR +/– on the remote commander until the required program position appears on the screen.

3 Press TV SYSTEM until your local TV system appears (KV-J21MF1AK/J21MN1AK/J21MF3 only).

4 Press VOLUME +/– until the required channel picture appears on the screen.

5 Press MANUAL PROGR.

If the TV system is not properly selected (KV-J21MF1AK/J21MN1AK/J21MF3 only)

The color of the picture may be poor and/or the sound may be noisy. In this case, select the appropriate TV system.

1 Press PROGR +/– on the remote commander to select the program position.
2 Press TV SYSTEM until the picture and sound become normal.

Notes (KV-J21MF1AK/J21MN1AK/J21MF3 only)

- If you do not know your local TV system, consult your nearest authorized service center or dealer.
- The setting of the TV SYSTEM is memorized for each program position.

Disabling program positions using the buttons on the TV

By disabling unused or unwanted program positions, you can skip those positions when you press PROGR +/– on the remote commander.

1 Press PROGR +/– on the remote commander until the unused or unwanted program position appears on the screen.

2 Press MANUAL PROGR.

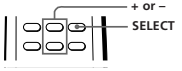
3 Press PIC MODE on the remote commander.

4 Press MANUAL PROGR.

To cancel the skip setting

Preset the channel manually or automatically again.

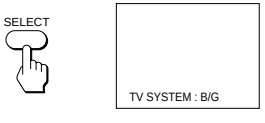
Presetting channels automatically using the remote commander



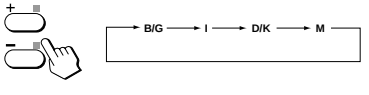
1 Press POWER to turn on the TV.

When the TV is turned on in standby mode, press POWER on the remote commander.

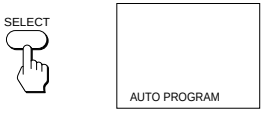
2 Press SELECT until "TV SYSTEM" appears (KV-J21MF1AK/J21MN1AK/J21MF3 only).



3 Press + or – to select your local TV system (KV-J21MF1AK/J21MN1AK/J21MF3 only).

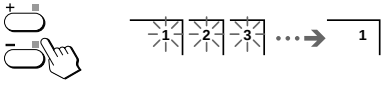


4 Press SELECT until "AUTO PROGRAM" appears.



5 Press + or – .

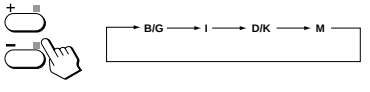
6 Press + or – .



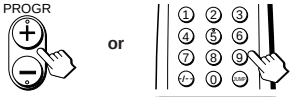
Presetting channels manually using the remote commander

1 Press SELECT until "TV SYSTEM" appears (KV-J21MF1AK/J21MN1AK/J21MF3 only).

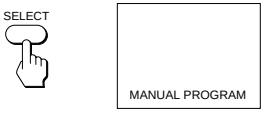
2 Press + or – to select your local TV system (KV-J21MF1AK/J21MN1AK/J21MF3 only).



3 Press PROGR +/– or a number button until the required program appears on the screen.

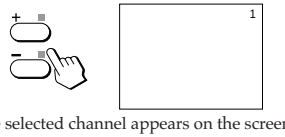


4 Press SELECT until "MANUAL PROGRAM" appears.



5 Press + or – .

6 Press + or – .



The selected channel appears on the screen.

7 Press SELECT to return to normal screen.

If you are not satisfied with the picture and sound quality

You may be able to further improve the picture and sound quality by using fine tuning as below:

1 **Select the program position you want to adjust.**

2 **Press SELECT until "MANUAL PROGRAM" appears on the screen.**

3 **Press + or – on the remote commander once.**

4 **Press DISP until "FINE" appears on the screen.**

5 **Press + or – continuously until you are satisfied with the picture and sound quality.**

6 **Press SELECT to return to normal screen.**

Watching the TV

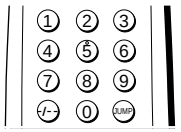
1 **Press POWER to turn on the TV.**

When the TV is turned on in standby mode, press POWER on the remote commander.

2 **Select the TV program you want to watch.**

To select a program position directly

Press the number button.



To select a two-digit program position, press "-/--" before pressing the number buttons.

For example: to select program position 25, press "-/--," and then "2" and "5."

To scan through program positions

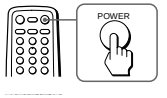
Press PROGR +/– until the program position you want appears.

3 **Press VOL +/– to adjust the volume.**

Turning off the TV

To turn off the TV temporarily

Press POWER on the remote commander. The STANDBY indicator on the TV lights up.



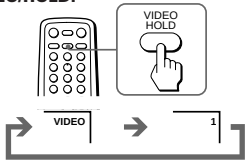
To turn off the TV completely

Press POWER on the TV.

If the power on the TV is turned off in standby mode, the STANDBY indicator on the TV may remain alight for a while.

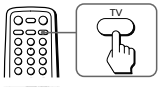
Watching the video input

Press VIDEO/HOLD.



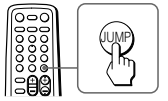
To watch TV

Press TV.



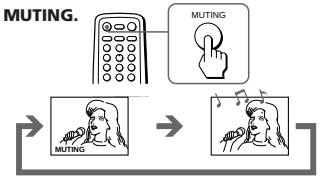
Switching back quickly to the previous channel

Press JUMP.



Muting the sound

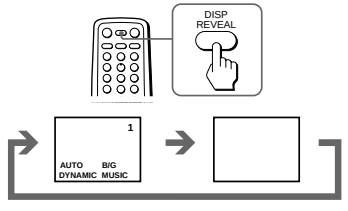
Press MUTING.



KV-J21MF1AK/J21MF3
KV-J21MN1AK/J21PF1
RM-883

Displaying on-screen information

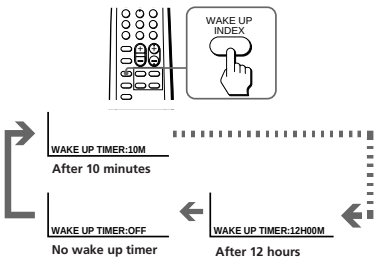
Press DISP/REVEAL.
The program position, local system, and TV settings are displayed on the screen.



Setting the Wake Up Timer

You can set the TV to automatically turn on as you have programmed.

1 Press WAKE UP/INDEX repeatedly to set the timer.
The on-screen display appears and the WAKE UP indicator on the TV lights up.



2 If you want a particular TV program or video input to be displayed using the Wake Up Timer, select the TV program or video input.

3 Press POWER on the remote commander or set the Sleep Timer to turn off the TV in standby mode.

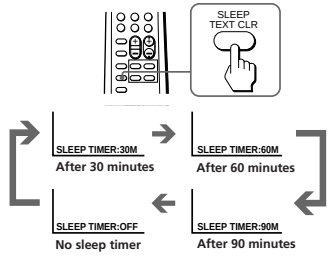
To cancel the Wake Up Timer, press WAKE UP/INDEX repeatedly until "WAKE UP TIMER: OFF" appears, or turn off the main power of the TV.

Notes
- The Wake Up Timer starts immediately after the on-screen display disappears.
- The last TV program position or video input just before the TV turns into standby mode will appear when the TV is turned on using the Wake Up Timer.
- If no buttons or controls are pressed for more than two hours after the TV is turned on using the Wake Up Timer, the TV automatically turns into standby mode. If you want to continue watching the TV, press any button or control on the remote commander or the TV.

Setting the Sleep Timer

You can set the TV to automatically turn off as you have programmed.

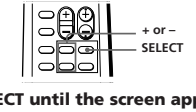
Press SLEEP/TEXT CLR.



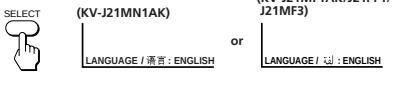
To cancel the Sleep Timer, press SLEEP/TEXT CLR repeatedly until "SLEEP TIMER: OFF" appears, or turn off the TV.

Changing the on-screen display language

You can use buttons on the remote commander or the TV to change the on-screen display language.



1 Press SELECT until the screen appears as follows:

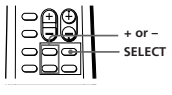


2 Press + or – to select "中文" or "عربي".

Note
- You can also use SELECT and VOLUME +/– on the TV to select the on-screen display language.

Using the Child Lock feature

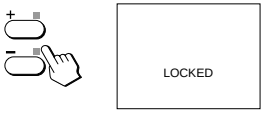
You can prevent a child from watching certain program positions by using the buttons on the remote commander.



1 Select the TV program you want to lock.

2 Press SELECT until "CHILD LOCK" appears on the screen.

3 Press + or – until "LOCKED" appears on the screen.

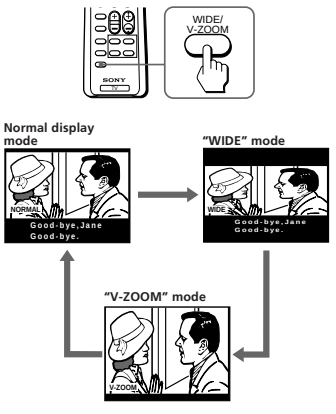


Notes
- To unlock the program position, repeat steps 1 to 3 as above until "LOCKED" disappears from the screen.
- To prevent your child from unlocking the program position, keep the remote commander away from your child.

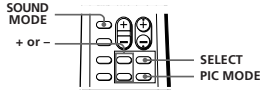
Watching the picture in wide mode

You can adjust the display mode accordingly to fit the programs to your TV screen size.

Press WIDE/V-ZOOM repeatedly until the wide display mode you want appears on the screen.



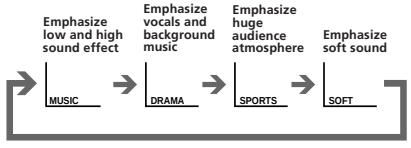
Adjusting the sound and picture



Selecting the sound mode

Press SOUND MODE until the mode you want appears.

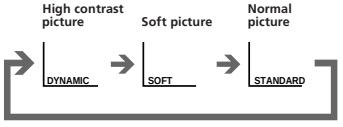
Each time you press SOUND MODE, the screen changes as follows:



Selecting the picture mode

Press PIC MODE until the mode you want appears.

Each time you press PIC MODE, the screen changes as follows:



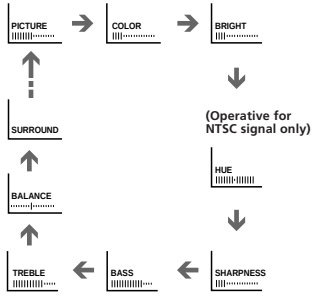
Note

- If you change the picture and sound mode after the following adjustments, the adjustment changes in accordance with the picture and sound mode.

Adjusting the sound and picture settings

1 Press SELECT until the item you want to adjust appears.

Each time you press SELECT, the screen changes as follows:



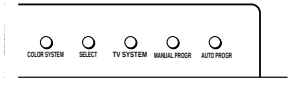
2 Press + or – to adjust the item.

3 To adjust other items, repeat steps 1 and 2.

Notes

- You can also use SELECT and VOLUME +/– on the TV to adjust the sound and picture settings.
- SURROUND is only applicable to a stereo signal. When receiving a monaural signal, please turn off SURROUND for the best sound.

Front of TV



If the picture color is abnormal when receiving programs through the ⅂ (antenna) terminal

Change the "TV SYSTEM" (for KV-J21MF1AK/J21MN1AK/J21MF3 only) or "COLOR SYSTEM" setting or adjust the "COLOR" level in the on-screen display until the color becomes normal.

If the picture color is abnormal when receiving programs through the video input jack

Change the "COLOR SYSTEM" setting or adjust the "COLOR" level in the on-screen display until the color becomes normal.

Note

- Normally set "COLOR SYSTEM" to "AUTO".

If the sound is distorted or noisy when receiving programs through the ⅂ (antenna) terminal

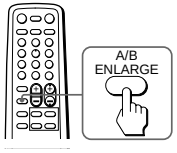
Change the "TV SYSTEM" setting (for KV-J21MF1AK/J21MN1AK/J21MF3 only) in the on-screen display until the sound becomes clear.

Selecting a stereo or bilingual program

■ ***KV-J21MN1AK only***

Press A/B/ENLARGE repeatedly until you receive the sound you want.

The on-screen display changes corresponding to the selected sound and the WAKE UP/STEREO indicator also lights up.



When receiving a NICAM program

Broadcasting	On-screen display (Selected sound)
NICAM stereo	NICAM (Stereo sound) → MONO (Regular sound)
NICAM bilingual	NICAM MAIN (Main sound) → NICAM SUB (Sub sound) → MONO (Regular sound)
NICAM monaural	NICAM MAIN (Main sound) → MONO (Regular sound)

When receiving an A2 (German) program

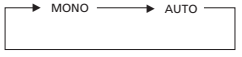
Broadcasting	On-screen display (Selected sound)
A2 (German) stereo	STEREO (Stereo sound)
A2 (German) bilingual	MAIN (Main sound) → SUB (Sub sound)

Notes

- If the signal is very weak, the sound becomes monaural automatically.
- If the stereo sound is noisy when receiving a NICAM program, select "MONO". The sound becomes monaural, however, the noise will be reduced.

If the sound is distorted or noisy when receiving a monaural program through the ⅂ (antenna) terminal

Press A/B/ENLARGE repeatedly until "MONO" appears on the screen.



To cancel the monaural sound setting, press A/B/ENLARGE again until "AUTO" appears on the screen.

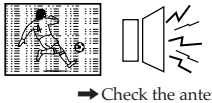
Notes

- The "MONO" or "AUTO" setting is memorized for each program position.
- You cannot receive stereo signal when the TV is in the "MONO" setting.

Troubleshooting

If you have any problems, read this manual again and check the countermeasure for each of the symptoms listed below.
If the problem persists, contact your nearest authorized service center or dealer.

Snowy picture
Noisy sound



➡Check the antenna.
➡Check the antenna connection on the TV and on the wall.
➡Check the TV SYSTEM setting (KV-J21MF1AK/J21MN1AK/J21MF3 only).

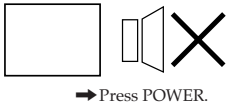
Dotted lines or stripes

➡This may be caused by local interference (e.g. cars, neon signs and hair dryers). Adjust the antenna for minimum interference.

Double images or "ghosts"

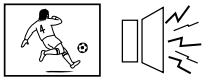
➡This may be caused by reflections from nearby mountains or buildings. A highly directional antenna may improve the picture.

No picture
No sound



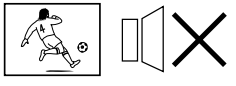
➡Press POWER.
➡Check the antenna connection.
➡Check the VCR connections.
➡Check the power cord connection.
➡Check the standby mode.

Good picture
Noisy sound



➡Check the TV SYSTEM setting (KV-J21MF1AK/J21MN1AK/J21MF3 only).
➡Reduce the TREBLE level or select the "SOFT" sound mode.

Good picture
No sound



➡Press VOLUME +.
➡Press MUTING.
➡Press A/B/ENLARGE (KV-J21MN1AK).

No color

➡Adjust the COLOR level in the on-screen display.
➡Check the COLOR SYSTEM setting.

TV cannot receive stereo signal

➡Press A/B/ENLARGE until "AUTO" appears on the screen (KV-J21MN1AK).

TV cabinet creaks

➡Even if the picture or the sound is normal, changes in the room temperature sometimes make the TV cabinet expand or contract, making a noise. This does not indicate a malfunction.

Note on the remote commander

- The supplied remote commander is used on several models of the TV. If you do not find instructions for some controls that are on the remote commander, that means your TV does not employ the features of those controls, e.g. TEXT.

Note on the TV SYSTEM button

- The TV SYSTEM button is not used on your TV (KV-J21PF1 only).

Notes

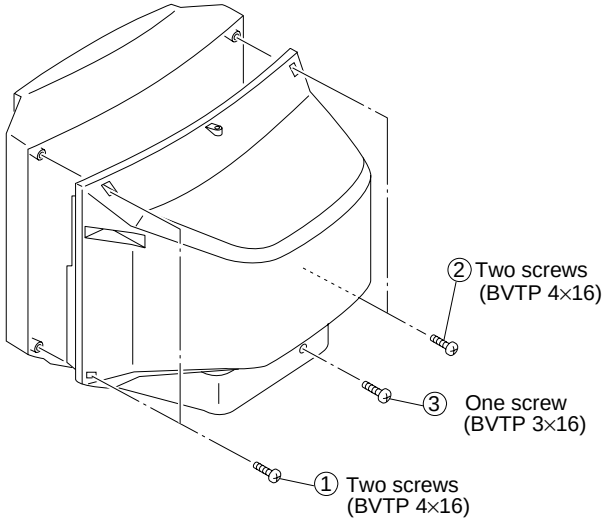
- When you switch on the TV, you may hear the "boon" sound that is caused by the demagnetization of the TV. This does not indicate a malfunction.
- The picture color may become abnormal if you change the direction of your TV. To obtain the normal picture color, press POWER on the TV to switch off the TV for five minutes and then switch it on again.

WARNING

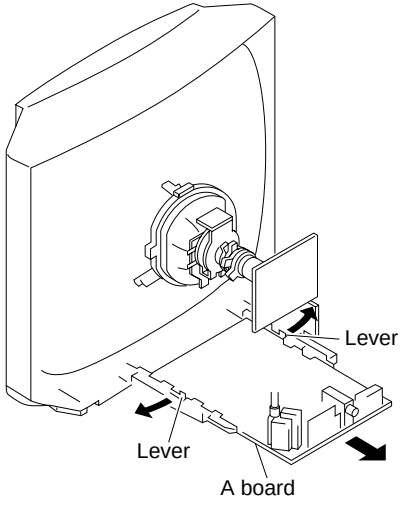
Do not install the appliance in a confined space, such as a bookcase or built-in cabinet.

SECTION 2
DISASSEMBLY

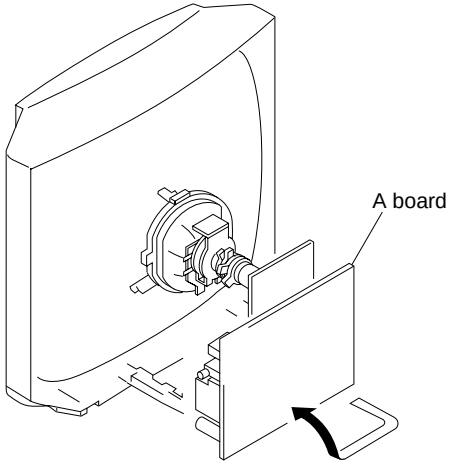
2-1. REAR COVER REMOVAL



2-2. A BOARD REMOVAL



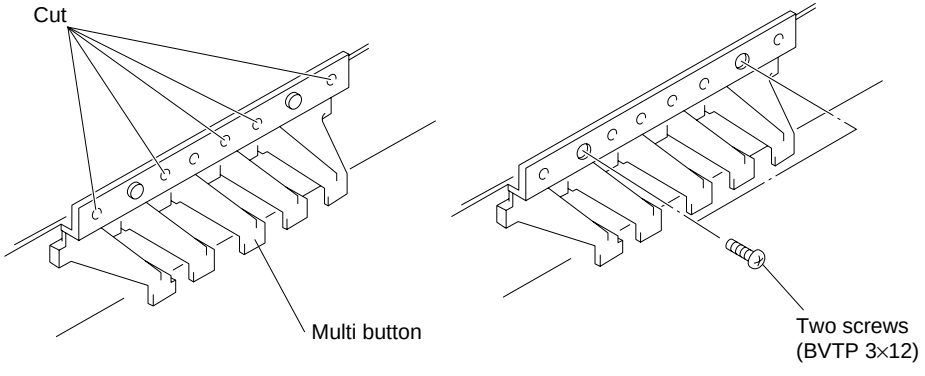
2-3. SERVICE POSITION



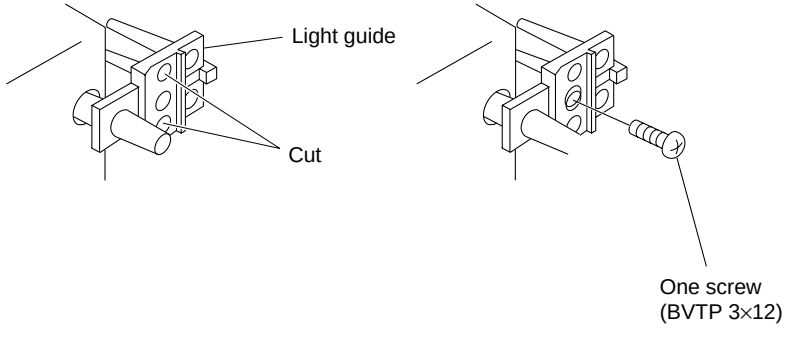
2-4. REPLACEMENT OF PARTS

For replacement of the Multi Button, Power Button and Light Guide, cut the welded portions from them, exchange with the new parts, and fix them with screws (+BVTP) respectively.

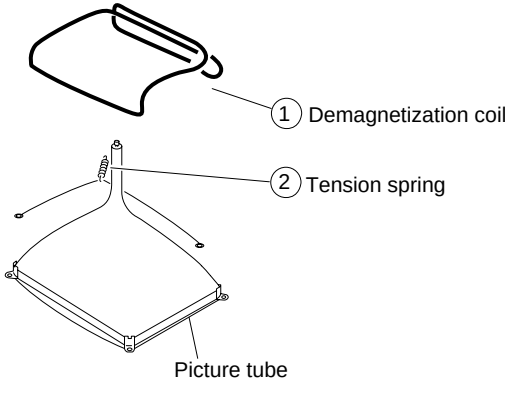
2-4-1. REPLACEMENT OF MULTI BUTTON



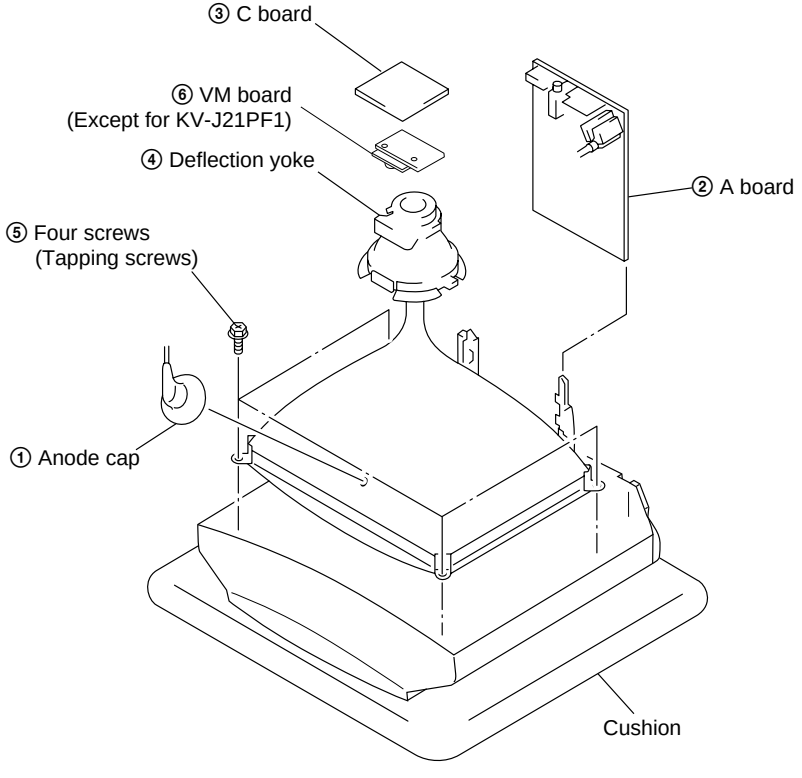
2-4-2. REPLACEMENT OF LIGHT GUIDE



2-5. DEMAGNETIZATION COIL REMOVAL



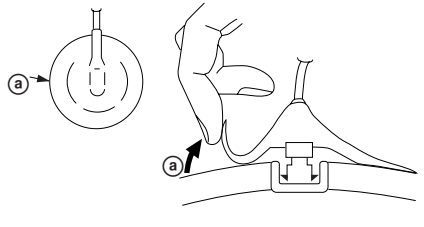
2-6. PICTURE TUBE REMOVAL



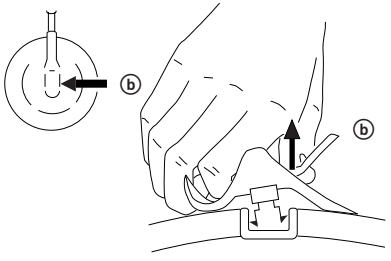
• REMOVAL OF ANODE-CAP

NOTE : After removing the anode, short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon paint on the CRT.

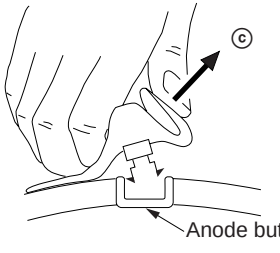
• REMOVING PROCEDURES



① Turn up one side of the rubber cap in the direction indicated by the arrow ⓐ.



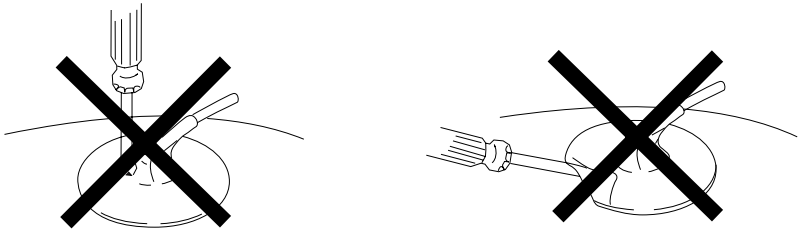
② Using a thumb press down, then pull up the rubber cap firmly in the direction indicated by the arrow ⓑ.



③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling it up in the direction of the arrow ⓒ.

• HOW TO HANDLE AN ANODE-CAP

① Do not damage the surface of anode-cap with sharp shaped objects.
② Do not press the rubber too hard so as not to damage the inside of anode-cap. A metal fitting called the shatter-hook terminal is built into the rubber.
③ Do not turn the foot of rubber over too hard. The shatter-hook terminal will stick out or damage the rubber.



SECTION 3
SET-UP ADJUSTMENTS

- The following adjustments should be made when a complete realignment is required or a new picture tube is installed.
- These adjustments should be performed with rated power supply voltage unless otherwise noted.

Controls and switch should be set as follows unless otherwise noted:
PICTURE control ..... normal
BRIGHTNESS control ..... normal

Perform the adjustments in the following order:

1. Beam Landing
2. Convergence
3. Focus
4. White Balance

Note : Test Equipment Required:

1. Color-bar/Pattern Generator
2. Degausser
3. Oscilloscope

Preparation :

- In order to reduce the influence of geomagnetism on the set's picture tube, face it east or west.
- Switch on the power and degauss with the degausser.

3-1. BEAM LANDING

1. Input a white signal with the pattern generator.
   Contrast } normal
   Brightness }
2. Position neck assy as shown in Figure 3-1. (Except for KV-J21PF1)
3. Set the pattern generator raster signal to green.
4. Move the deflection yoke to the rear and adjust with the purity control so that the green is at the center and the blue and the red take up equally sized areas on each side.
   (See Figures 3-1 through 3-3.)
5. Move the deflection yoke forward and adjust so that entire screen is green. (See Figure 3-1.)
6. Switch the raster signal to blue, then to red and verify the condition.
7. When the position of the deflection yoke has been decided, fasten the deflection yoke with the screws.
8. If the beam does not land correctly in all the corners, use a magnet to adjust it. (See Figure 3-4.)

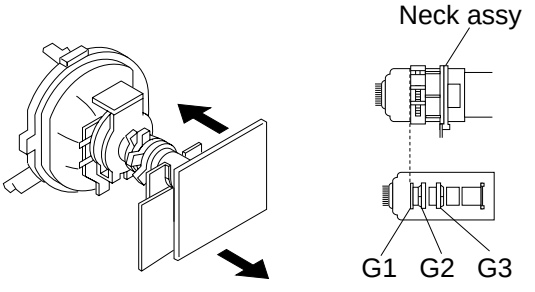


Fig. 3-1

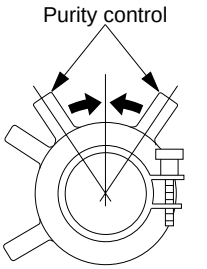


Fig. 3-2

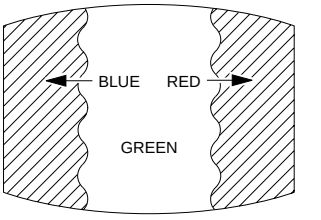


Fig. 3-3

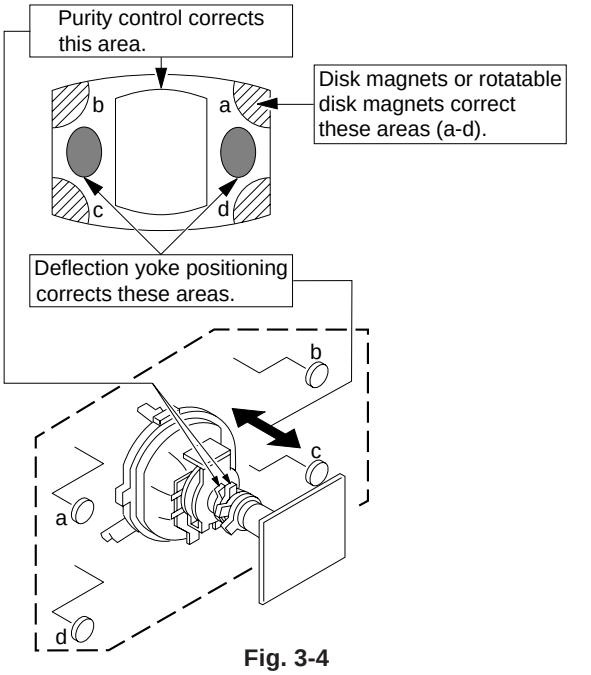


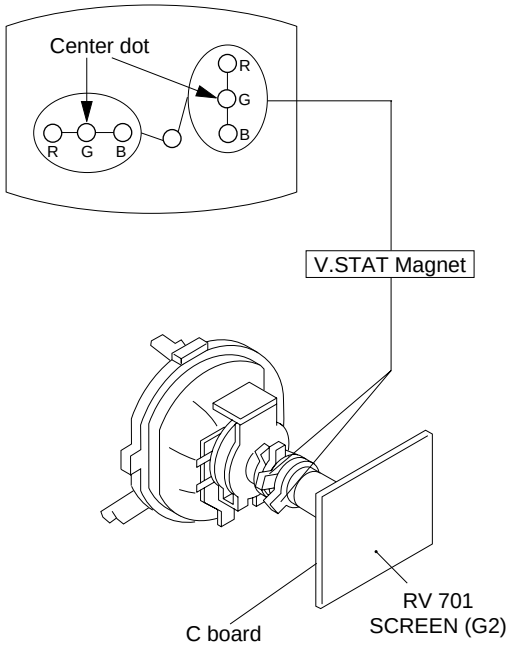
Fig. 3-4

3-2. CONVERGENCE

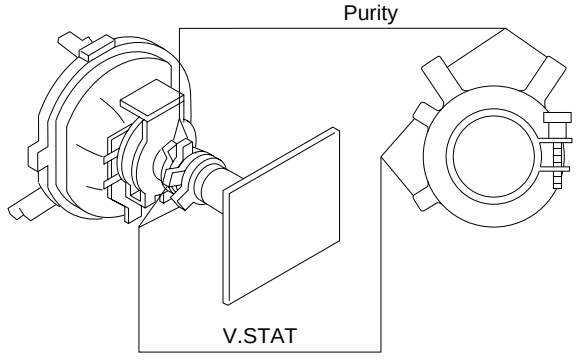
Preparation :

- Before starting this adjustment, adjust the focus, horizontal size, and vertical size.
- Minimize the brightness setting.
- Provide dot pattern.

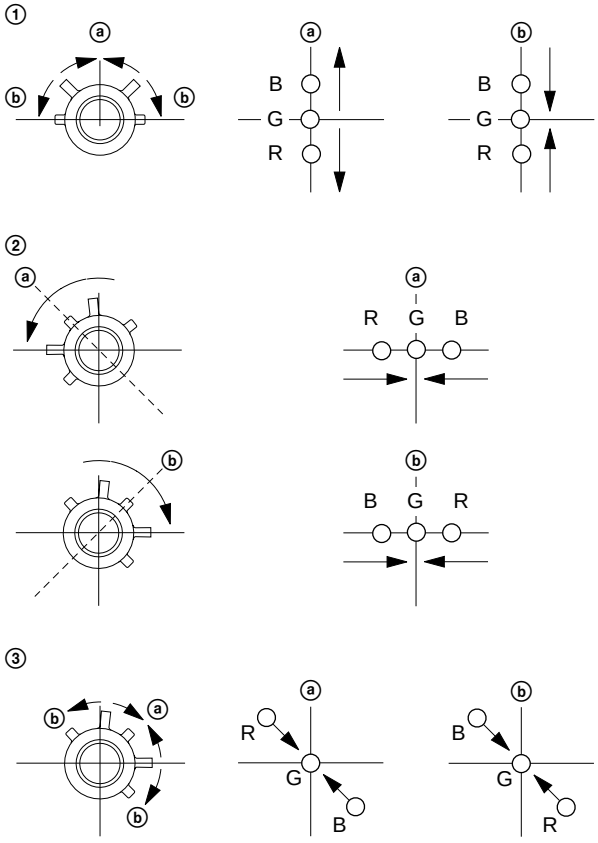
(1) Horizontal and Vertical Static Convergence



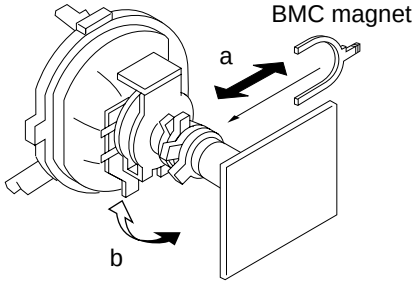
1. (Moving vertically), adjust the V.STAT magnet so that the red, green and blue dots are on top of each other at the center of the screen.
2. (Moving horizontally), adjust the H.STAT VR so that the red, green and blue dots are on top of each other at the center of the screen.



- Operation of V.STAT magnet.
  If the V.STAT magnet is moved in the direction of the ⓐ and ⓑ arrows, the red, green and blue dots move as shown below.



- Operation of BMC (Hexapole) magnet.
  If the blue or red dot does not converge with the other two dots, perform following steps.
  Move BMC magnet (a) to correct insufficient H.static convergence.
  Rotate BMC magnet (b) to correct insufficient V.static convergence.
  In either case, repeat Beam Landing Adjustment.

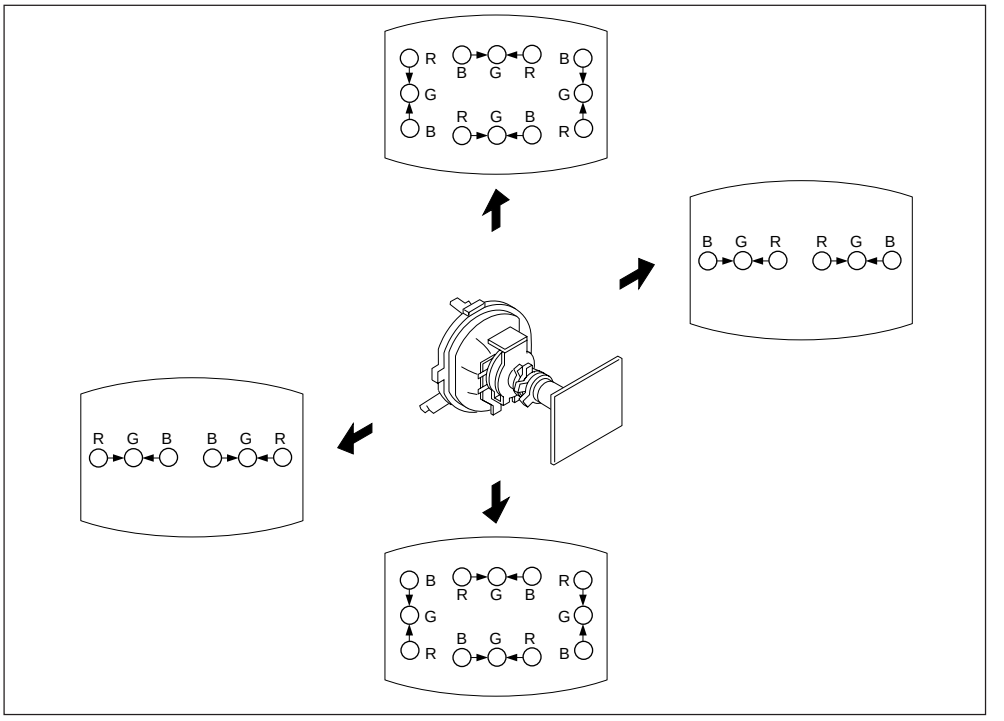


(2) Dynamic Convergence Adjustment

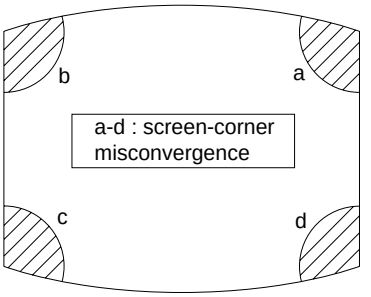
Preparation :

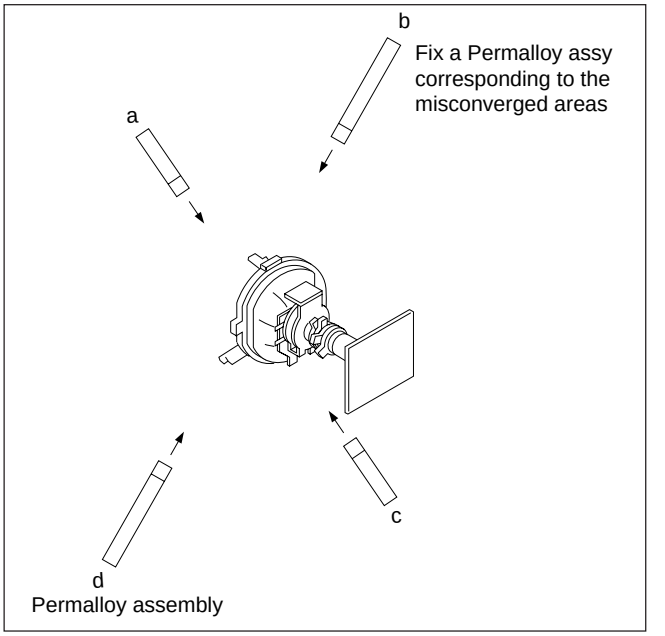
- Before starting this adjustment, adjust the horizontal static convergence and the vertical static convergence.

1. Slightly loosen the deflection yoke screws.
2. Remove the deflection yoke spacer.
3. Move the deflection yoke as shown in the figure below and optimize the convergence.
4. Tighten the deflection yoke screws.
5. Install the deflection yoke spacer.



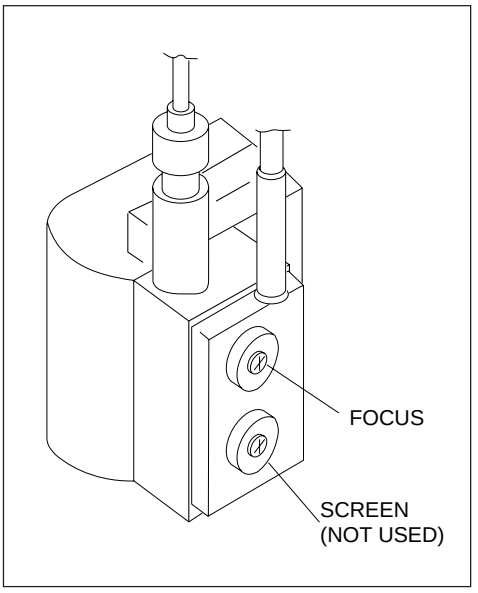
(3) Screen-corner Convergence





3-3. FOCUS ADJUSTMENT

Adjust FOCUS control on the flyback transformer for the best focus.



Note: Screen VR is not use.

a. AN ITEM OF ADJUSTMENT

Item number	Adjustment item	Initial DATA	Note
09	RDR	28	WHITE POINT R
0A	GDR	20	WHITE POINT G
0B	BDR	20	WHITE POINT B

b. METHOD OF CANCELLATION FROM SERVICE MODE

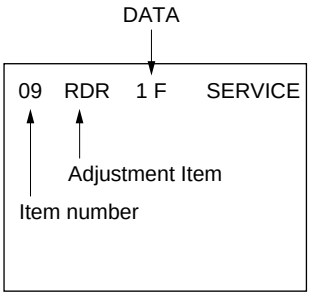
Set the standby condition (Press [POWER] button on the commander) and then press [POWER] button again, hereupon it becomes TV mode.

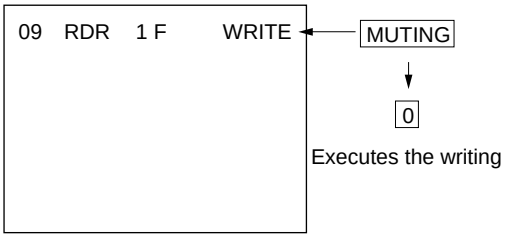
c. METHOD OF WRITE FOR MEMORY

1) Set to Service Mode.
2) Press [1] (UP) and [4] (DOWN) to select an item of adjustments.
3) Press [MUTING] button and it will indicate WRITE on screen.
4) Press [0] button to write into memory.

d. MEMORY WRITE CONFIRMATION METHOD

1) After adjustment, pull out the plug from AC outlet, and then plug into AC outlet again.
2) Turn the power switch ON and set to Service Mode.
3) Call the adjusted items again, confirm they were adjusted.

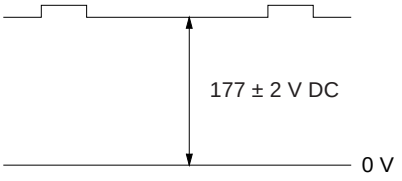




3-4. G2 (SCREEN) AND WHITE BALANCE ADJUSTMENTS

1. G2 (SCREEN) ADJUSTMENT (RV701)

1) Set the PICTURE and BRIGHTNESS to normal.
2) Put to VIDEO input mode without signals.
3) Connect R, G and B of the C board cathode to the oscilloscope.
4) Adjust G2 (RV701) volume to the value below.



2. WHITE BALANCE ADJUSTMENTS

1) Set to Service Mode.
2) Input an entire white signal.
3) Set the PICTURE to maximum.
4) Select RDR(09) with [1] and [4], and then set the level to 28 with [3] and [6].
5) Select GDR(0A) and BDR(0B) with [1] and [4] and adjust the level with [3] and [6] for the best white balance.
6) Write into the memory by pressing [MUTING], then [0].

SECTION 4
SELF DIAGNOSIS FUNCTION

If no acknowledgement is returned from a device which is turned "ON", the device has a problem.
In this case, one of the LED's responding to the problem device will flicker a defined number of times.

Flickering is operated by lighting the LED's for 60ss each time.

The flickering frequency responding to each failed device is shown below.

Device	NONVOLA-TILE MEMORY	—	Y/C JUNGLE	—	—	TONE CONTROL (IC 201)
Flickering Frequency	1	—	3	—	—	6

All the devices are checked one after another from the left of the table.
If an error is found, the responding LED will start flickering.
So, if more than 1 device have failed, only the one on the left side will flicker.

SECTION 5
CIRCUIT ADJUSTMENTS

5-1. ADJUSTMENTS WITH COMMANDER

Service adjustments are made with the RM-883 that comes with this unit.

Entering service mode

With the unit on standby

↓

DISPLAY

↓

5

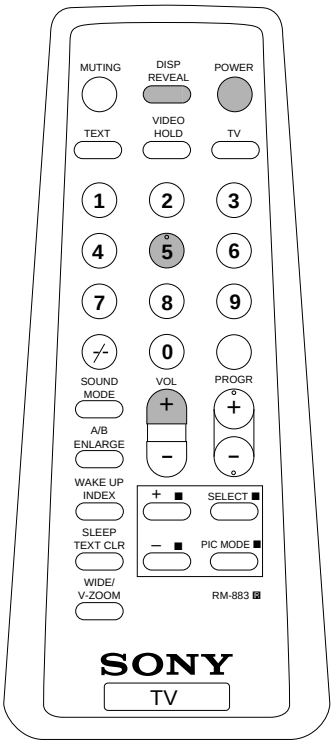
↓

VOL (+)

↓

POWER

The operation sequence puts the unit into service mode.

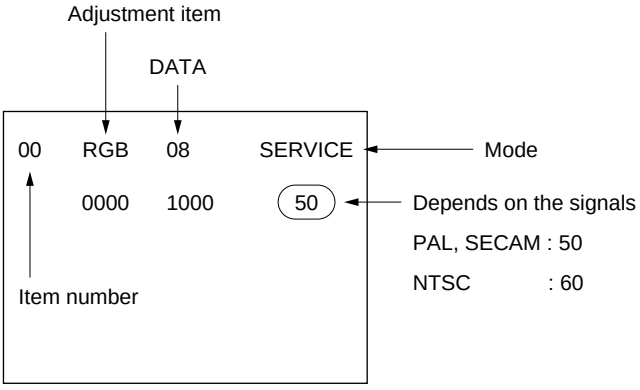


RM-883

1, 4	Raise/lower the service item number
3, 6	Raise/lower the data
MUTING	Writes
0	Executes the writing

7, 0	All data becomes the values in memory
8, 0	All user control goes to the standard state
5, 0	Service data initialization (Be sure not to use usually.)
2, 0	Write 50Hz adjustment data to 60Hz, or viceversa.

The screen display is :



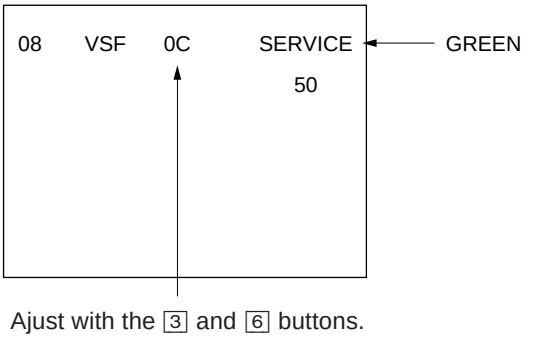
1, 4	Select the adjustment item.
↓	
3, 6	Raise/lower the data.
↓	
MUTING	Writes
↓	
0	Executes the writing.

5-2. ADJUSTMENT METHOD

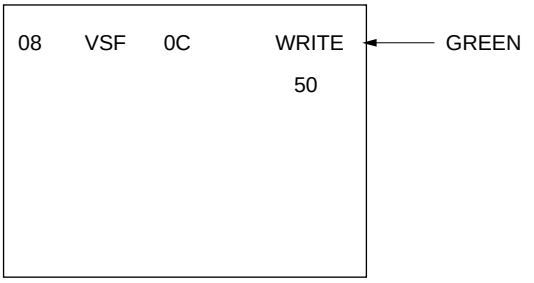
Item Number 08

This explanation uses V-SHIFT as an example.

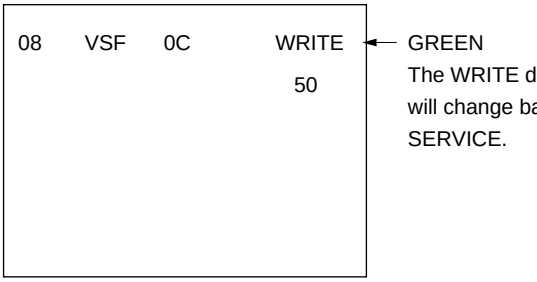
1. Select 08 V-SHIFT with the [1] and [4] buttons.
2. Raise/lower the data with the [3] and [6] buttons.
3. Select the optimum state. (The standard is 0F for PAL reception.)
4. Write with the [MUTING] button.
5. Execute the writing with the [0] button. (The WRITE display returns to green SERVICE.)



Ajust with the [3] and [6] buttons.



Written with the [MUTING].



Write executed with [0] .

Use the same method for Items Number 00-4B. Use [1] and [4] to select the adjustment item, use [3] and [6] to adjust, write with [MUTING], then execute the write with [0].

Adjustment Item Table (For KV-J21MF1AK/J21MF3/J21PF1)

Item number	Adjustment Item	Data range	Initial data	Standard data	Note	Device
00	HSF	00–3F	24	50/60Hz	H SHIFT	TDA8375
01	HSZ	00–3F	23	50/60Hz	H SIZE	TDA8375
02	PAP	00–3F	21	50/60Hz	PIN AMPLITUDE	TDA8375
03	CNP	00–3F	29	50/60Hz	CORNER PIN	TDA8375
04	TLT	00–3F	20	50/60Hz	TILT	TDA8375
05	VSL	00–3F	20	50/60Hz	V SLOPE	TDA8375
06	VAP	00–3F	1D	50/60Hz	V AMPLITUDE	TDA8375
07	SCR	00–3F	20	50/60Hz	S CORRECTION	TDA8375
08	VSF	00–3F	20	50/60Hz	V SHIFT	TDA8375
09	RDR	00–3F	28		WHITE POINT R	TDA8375
0A	GDR	00–3F	20		WHITE POINT G	TDA8375
0B	BDR	00–3F	20		WHITE POINT B	TDA8375
0C	FO	00–03	00	TV: 00 VIDEO: 00 TEXT: 01	ø TIME CONSTANT	TDA8375
0D	AGC	00–3F	30	TV: 30 VIDEO: 30 TEXT: 30	AGC TAKE OVER	TDA8375
0E	VSW	00–01	00	TV: 00 VIDEO: 01 TEXT: 00	VIDEO MUTE	TDA8375
0F	FOR	00–03	00		FORCED FIELD FREQ.	TDA8375
10	DL	00–01	00		INTERLACE	TDA8375
11	POC	00–01	00		SYNCHRO MODE FIX	TDA8375
12	VID	00–01	00	50/60Hz	VIDEO IDENT MODE	TDA8375
13	HCO	00–01	00	50/60Hz	EHT TRACKING MODE	TDA8375
14	EVG	00–01	00	50/60Hz	ENABLE V GUARD	TDA8375
15	SBL	00–01	00	50/60Hz	SERVICE BLANKING	TDA8375
16	PRD	00–01	00	50/60Hz	OVER-VOLTAGE INPUT	TDA8375
17	COR	00–01	00	TV/VIDEO/TEXT	NOISE CORING PEAK	TDA8375
18	PMX	00–3F	2D		PICTURE MAX DATA	TDA8375
19	PMI	00–3F	00		PICTURE MIN DATA	TDA8375
1A	SBR	00–7F	4B		SUB-BRIGHTNESS	TDA8375
1B	SHU	00–0F	07		SUB-HUE	TDA8375
1C	SSH	00–03	01	TV: 01 VIDEO: 02	SUB-SHARPNESS	TDA8375
1D	SC1	00–3F	1F	50: 26 60: 29	SUB-COLOR LOWER	TDA8375
1E	SC2	00–3F	0D	50: 0C 60: 0D	SUB-COLOR HIGHER	TDA8375
1F	AIP	00–7F	3F		ADJUSTMENT IF-PLL	TDA8375
20	VZM	00–3F	19		VERTICAL ZOOM	TDA8375
21	TXP	00–0F	09		TEXT PICTURE CONT.	SAA5281
22	MXP	00–0F	0D		TEXT MIX MODE PIC.	SAA5281
23	BKP	00–3F	00		BLK OFF PICTURE	µ-CON
24	ODL	00–FF	10		POWER ON DELAY	µ-CON
25	OFR	00–0F	00		STBY → ON RGB OUT	µ-CON
26	OFM	00–0F	00		MAIN POWER RGB OUT	µ-CON
27	OSH	00–3F	0A		OSD POSITION H	µ-CON
28	MUT	00–01	01		NO SYNC. MUTE	µ-CON
29	ABL	00–01	01		BRIGHT ABL	µ-CON
2A	DTV	00–01	00		DISABLE TV SYSTEM KEY	µCON
2B	SCM	00–01	01		SECAM TRAP ACTIVE	µ-CON
2C	ROC	00–0F	07		ROTATION CENTER	µCON
2D	ROS	00–07	03		ROTATION STEP WIDTH	µ-CON
2E	DVM	00–01	00		DISABLE VM	µ-CON
2F	POM	00–01	00		PORT MUTE	µ-CON
30	FBT	00–01	00		CM FOR FBT LAYER SHORT	µ-CON
31	OP0	00–FF	40		OPTION 0	µ-CON
32	OP1	00–FF	06		OPTION 1	µ-CON
33	OP2	00–FF	00		OPTION 2	µ-CON

Adjustment Item Table (For KV-J21MN1AK)

Item number	Adjustment Item	Data range	Initial data	Standard data	Note	Device
00	HSF	00–3F	24		H SHIFT	TDA8375
01	HSZ	00–3F	23		H SIZE	TDA8375
02	PAP	00–3F	21		PIN AMPLITUDE	TDA8375
03	CNP	00–3F	29		CORNER PIN	TDA8375
04	TLT	00–3F	20		TILT	TDA8375
05	VSL	00–3F	20		V SLOPE	TDA8375
06	VAP	00–3F	1D		V AMPLITUDE	TDA8375
07	SCR	00–3F	20		S CORRECTION	TDA8375
08	VSF	00–3F	20		V SHIFT	TDA8375
09	RDR	00–3F	28		WHITE POINT R	TDA8375
0A	GDR	00–3F	20		WHITE POINT G	TDA8375
0B	BDR	00–3F	20		WHITE POINT B	TDA8375
0C	FO	00–03	00		ø TIME CONSTANT	TDA8375
0D	AGC	00–3F	30		AGC TAKE OVER	TDA8375
0E	VSW	00–01	00		VIDEO MUTE	TDA8375
0F	FOR	00–03	00		FORCED FIELD FREQ.	TDA8375
10	DL	00–01	00		INTERLACE	TDA8375
11	POC	00–01	00		SYNCHRO MODE FIX	TDA8375
12	VID	00–01	00		VIDEO IDENT MODE	TDA8375
13	HCO	00–01	00		EHT TRACKING MODE	TDA8375
14	EVG	00–01	00		ENABLE V GUARD	TDA8375
15	SBL	00–01	00		SERVICE BLANKING	TDA8375
16	PRD	00–01	00		OVER-VOLTAGE INPUT	TDA8375
17	COR	00–01	00		NOISE CORING PEAK	TDA8375
18	PMX	00–3F	27		PICTURE MAX DATA	TDA8375
19	PMI	00–3F	05		PICTURE MIN DATA	TDA8375
1A	SBR	00–7F	4B		SUB-BRIGHTNESS	TDA8375
1B	SHU	00–0F	07		SUB-HUE	TDA8375
1C	SSH	00–03	01		SUB-SHARPNESS	TDA8375
1D	SC1	00–3F	1F		SUB-COLOR LOWER	TDA8375
1E	SC2	00–3F	0B		SUB-COLOR HIGHER	TDA8375
1F	AIP	00–7F	3F		ADJUSTMENT IF-PLL	TDA8375
20	VZM	00–3F	19		VERTICAL ZOOM	TDA8375
21	FAW	00–FF	08		NICAM FAW THRESH	MSP3410
22	CTM	00–FF	08		NICAM ERROR BIT (MONO)	MSP3410
23	CTN	00–FF	50		NICAM ERROR BIT (NICAM)	MSP3410
24	WCD	00–FF	0A		DATA CHANGE BEFORE W. G.	MSP3410
25	WST	00–FF	15		MONO → W. G. STEREO DISCONNECTING POINT	MSP3410
26	WTM	00–FF	50		W.G CHANGE TIMER	MSP3410
27	WBT	00–FF	EA		W. B BILINGUAL DISCONNECTING POINT	MSP3410
28	ACG	00–01	01		AGC AUTO/CONSTANT	MSP3410
29	CDB	00–3F	28		AGC GAIN CONSTANT	MSP3410
2A	FGP	00–7F	24		FM (B/G, I, D/K) PRESCALE	MSP3410
2B	FMP	00–7F	40		FM (M) PRESCALE	MSP3410
2C	WGP	00–7F	3C		W. G. PRESCALE	MSP3410
2D	NIP	00–7F	7F		NICAM PRESCALE	MSP3410
2E	CRM	00–01	00		CARRIER MUTE	MSP3410
2F	CML	00–03	00		CARRIER MUTE LEVEL	MSP3410
30	ACO	00–01	01		AUDIO CLOCK OUT	MSP3410
31	WAC	00–01	01		W. G. AGREEMENT COUNT	MSP3410
32	DLY	00–FF	30		STEREO SEARCH DELAY	MSP3410
33	DLG	00–FF	10		INTERVAL OF ID CHECK	MSP3410

Item number	Adjustment Item	Data range	Initial data	Standard data	Note	Device
34	TXP	00–0F	09		TEXT PICTURE	SAA5281
35	MXP	00–0F	0D		TEXT MIX MODE PICTURE	SAA5281
36	BKP	00–3F	00		BLK OFF PICTURE	µ-CON
37	HBL	00–3F	25		H BLK LEFT WIDTH	µ-CON
38	HBR	00–3F	20		H BLK RIGHT WIDTH	µ-CON
39	VBH	00–7F	00		H BLK HIGH WIDTH	µ-CON
3A	VBL	00–7F	FF		H BLK LOW WIDTH	µ-CON
3B	ODL	00–FF	10		POWER ON DELAY	µ-CON
3C	OFR	00–0F	00		STBY → ON RGB OUT	µ-CON
3D	OFM	00–0F	00		MAIN POWER RGB OUT	µ-CON
3E	OSH	00–3F	0A		OSD POSITION H	µ-CON
3F	DKS	00–01	01		D/K NICAM	µ-CON
40	MUT	00–01	01		NO SYNC. MUTE	µ-CON
41	DWZ	00–01	01		DIABLE WIDEZOOM	µ-CON
42	ABL	00–01	01		BRIGHT ABL	µ-CON
43	DTV	00–01	00		DISABLE TV SYSTEM KEY	µ-CON
44	SCM	00–01	00		SECAM TRAP ACTIVE	µ-CON
45	ROC	00–0F	07		ROTATION CENTER	µ-CON
46	ROS	00–07	03		ROTATION STEP WIDTH	µ-CON
47	DVM	00–01	00		DISABLE VM MUTE	µ-CON
48	FBT	00–01	00		C/M FOR FBT LAYER SHORT	µ-CON
49	OP0	00–FF	40		OPTION 0	µ-CON
4A	OP1	00–FF	07		OPTION 1	µ-CON
4B	OP2	00–FF	00		OPTION 2	µ-CON

NOTE

- Standard Data: Those are the standard data values written on the microprocessor. Therefore, the data values of the modes are stored respectively in the memory.
  In case of a device replacement, adjustment by rewriting the data value is necessary for some items.
- 50 ..... 50 Hz data
- 60 ..... 60 Hz data
- Standard data listed on the adjustment item table are reference values, therefore it is different for every model.

ITEM INFORMATION

- 10. DL: TV/MIX Mode 0=Interlace 1=interlace, TEXT Mode 0=interlace 1=Interlace
- 29. ABL (For KV-J21MF1AK/J21MF3/J21PF1) • 42. ABL (For KV-J21MN1AK): Bright ABL ON/OFF ON=1 OFF=0
- 31. OP0 • 32. OP1 • 33. OP2 (For KV-J21MF1AK/J21MF3/J21PF1)
- 49. OP0 • 4A. OP1 • 4B. OP2 (For KV-J21MN1AK)

  Input data are different according to models.
  AV INPUT : 00 → NO MODEL, 01 → MONO, CXA1315, 10/11 → STEREO, TDA8424
  TV System : 00 → Multi model, 01 → B/G, 10 → D/K.I, 11 → B/G D/K
  NTSC, SECAM, Chin
  Shrp : Dynamic Mode @ 1 → Sharpness 50%, 0 → Sharpness 70%.
  VM Operation : 0 → OFF, 1 → ON

No. 31/49 OP0 * Input data are different according to models

Item	–	AV Input		–	Remote Preset	Auto Program	Arabic/ Video	Reserved
KV-J21MF1AK	0	1	0	0	1	1	1	0
KV-J21MF3	0	1	0	0	1	1	1	0
KV-J21MN1AK	0	1	0	0	1	1	0	0
KV-J21PF1	0	0	0	0	1	1	1	0

No. 32/4A OP1

Item	–	Tilt	–	TV System		NTSC 3.58	SECAM	Chin
KV-J21MF1AK	0	0	0	0	0	1	1	0
KV-J21MF3	0	0	0	0	0	1	1	0
KV-J21MN1AK	0	0	0	0	0	1	1	1
KV-J21PF1	0	0	0	0	1	1	0	0

No. 33/4B OP2

Item	–	–	Child Lock	Space Sound	High Dev.	100 Prg	4.3 Wide	S.Video
KV-J21MF1AK	0	0	1	0	0	1	1	0
KV-J21MF3	0	0	1	0	0	1	1	0
KV-J21MN1AK	0	0	1	0	0	1	1	0
KV-J21PF1	0	0	1	0	0	1	1	0

5-3. A BOARD ADJUSTMENT AFTER IC003 (MEMORY) REPLACEMENT

1. Enter to Service Mode.

2. Press commander buttons [5] and [0] (Data Initialize), and [2] and [0] (Data Copy) to initialize the data.

3. Call each item number, and check if the respective screen shows the normal picture.
   In case some items are not well-adjusted, give them fine adjustment.
   Write the data per each item number ([MUTING] + [0]).

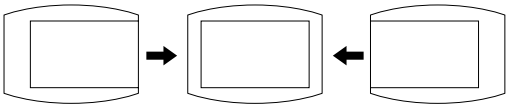
4. Select item numbers “31/49” (OP0), “32/4A” (OP1) and “33/4B” (OP2) and respectively set the bit per model with command buttons [3] and [6].

5. Press commander buttons [8] and [0] (Test Normal) to return to the data that was set on the shipment from the factory.
   (= Cancel Service Mode.)

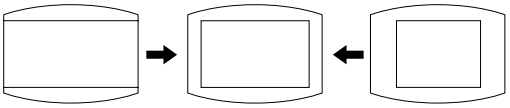
5-4. PICTURE DISTORTION ADJUSTMENT

Item Number 00 – 08

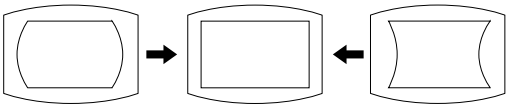
00 HSF (H SHIFT)



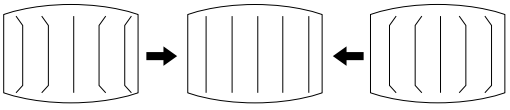
01 HSZ (H SIZE)



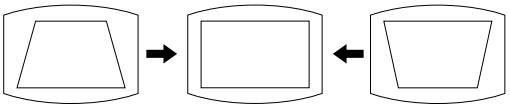
02 PAP (PIN AMPLITUDE)



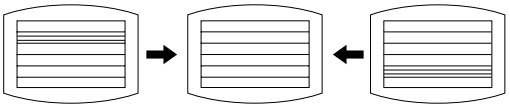
03 CNP (CORNER PIN)



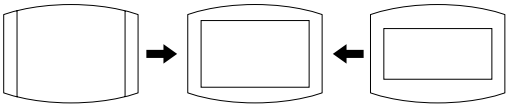
04 TLT (TILT)



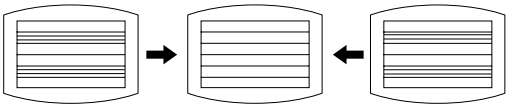
05 VSL (V SLOPE)



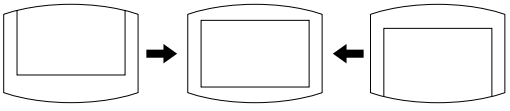
06 VAP (V AMPLITUDE)



07 SCR (S CORRECTION)



08 VSF (V SHIFT)



MEMO

KV-J21MF1AK/J21MF3
KV-J21MN1AK/J21PF1
RM-883

SECTION 7
EXPLODED VIEW

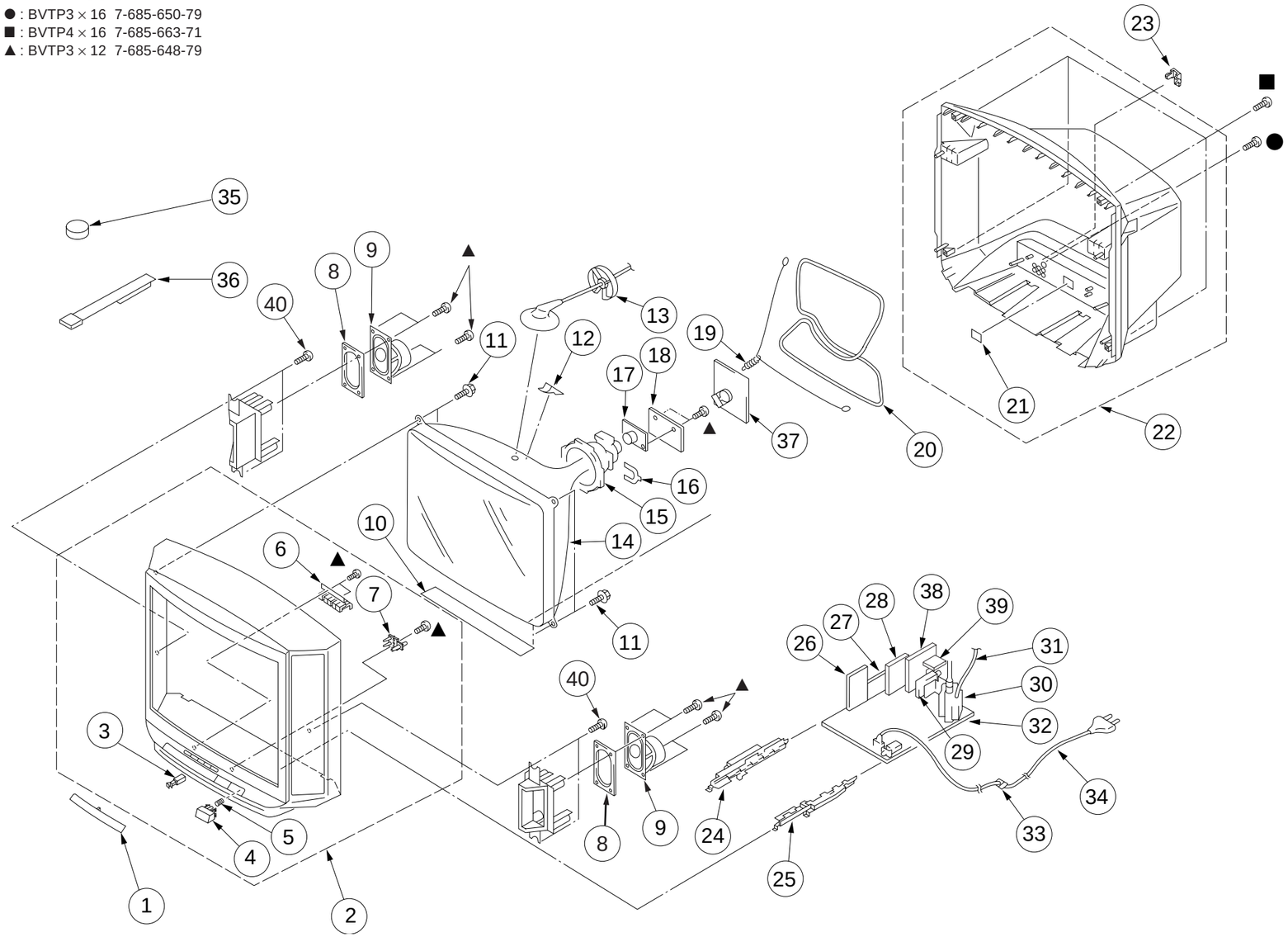
NOTE:

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

7-1. CHASSIS

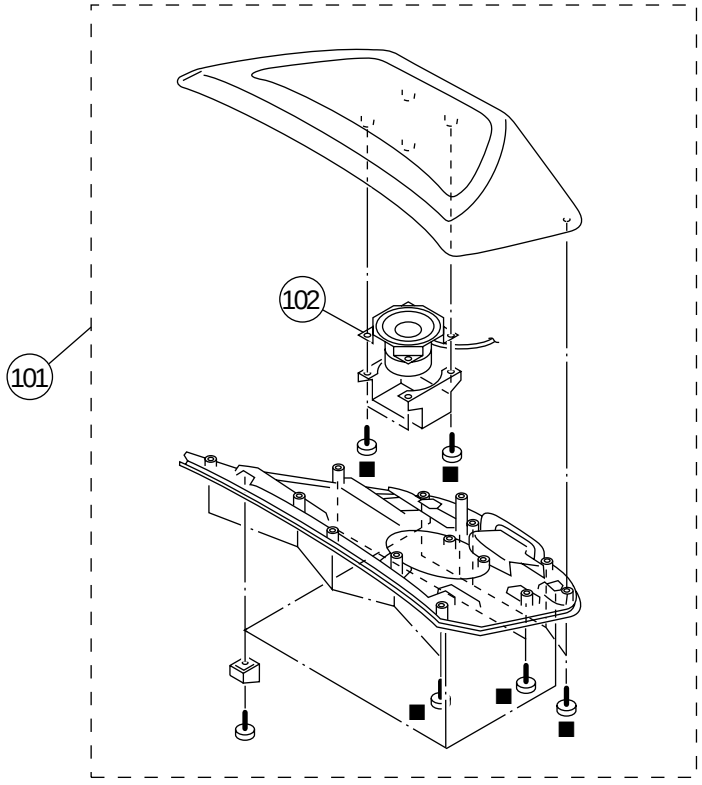
● : BVTP3 × 16 7-685-650-79
■ : BVTP4 × 16 7-685-663-71
▲ : BVTP3 × 12 7-685-648-79



1		4-060-121-51	DOOR, CONTROL (KV-J21MF1AK)
		4-060-121-21	DOOR, CONTROL (KV-J21MF3)
		4-060-121-41	DOOR, CONTROL (KV-J21MN1AK)
		4-060-121-31	DOOR, CONTROL (KV-J21PF1)
2		X-4035-534-1	BEZNET ASSY (KV-J21MF1AK) 1,3-7
		X-4035-333-1	BEZNET ASSY (KV-J21MF3) 1,3-7
		X-4035-533-1	BEZNET ASSY (KV-J21MN1AK) 1,3-7
		X-4035-505-2	BEZNET ASSY (KV-J21PF1) 1,3-7
3		4-047-464-01	CATCHER, PUSH
4		4-060-123-11	BUTTON, POWER (EXCEPT FOR KV-J21PF1)
		4-060-123-21	BUTTON, POWER (KV-J21PF1)
5		4-036-405-41	SPRING, COMPRESSION
6		4-060-122-11	BUTTON, MULTI (EXCEPT FOR KV-J21PF1)
		4-060-122-21	BUTTON, MULTI (KV-J21PF1)
7		4-060-124-01	LIGHT, GUIDE
8		4-054-408-01	CUSHION, SPEAKER
9		1-503-902-11	SPEAKER
10		4-054-468-01	SHEET, BLOTTING
11		4-057-862-01	SCREW, TAPPING 5+CROWN WASHER
12		4-046-600-11	SPACER, DY
13	*	3-704-372-41	HOLDER, HV CABLE
14	⚠	8-738-774-05	PICTURE TUBE (A51JUH71X)
15		8-451-280-33	DEFLECTION YOKE (Y21PXA2)
16		1-452-277-00	MAGNET, BMC
17		1-452-509-51	NECK ASSY, CRT (NA308) (EXCEPT FOR KV-J21PF1)
18	*	A-1342-422-A	VM BOARD, COMPLETE (KV-J21MF1AK/J21MN1AK)
19		4-369-318-71	SPRING, TENSION
20	⚠	1-409-942-11	COIL, DEMAGNETIZATION
21		4-049-416-11	BLIND, SHEET
22	⚠	X-4035-536-1	REAR COVER ASSY (KV-J21MF1AK/J21MN1AK)
21	⚠	X-4034-556-1	REAR COVER ASSY (KV-J21MF3/J21PF1) 21
23		4-049-130-21	CLAMP, CODE
24	*	4-060-125-01	GUIDE (L), PWB
25	*	4-060-126-01	GUIDE (R), PWB
26	*	A-1294-197-A	A11 BOARD, COMPLETE (KV-J21MF1AK/J21MN1AK)
	*	A-1293-714-A	A11 BOARD, COMPLETE (KV-J21MF3)
27	*	A-1294-182-A	A12 BOARD, COMPLETE (EXCEPT FOR KV-J21MF3)
	*	A-1294-149-A	A12 BOARD, COMPLETE (KV-J21MF3)
28		A-1298-553-A	A3 BOARD, COMPLETE (KV-J21MN1AK ONLY)
29	⚠	8-598-323-30	TUNER, VSS BT-AG401
30	⚠	1-453-193-21	TRANSFORMER ASSY, FLYBACK (NX-1742//M3A)
31	⚠	1-900-700-05	LEAD ASSY, FOCUS
32	*	A-1298-554-A	A BOARD, COMPLETE (KV-J21MF1AK)
	*	A-1298-517-A	A BOARD, COMPLETE (KV-J21MF3)
	*	A-1298-552-A	A BOARD, COMPLETE (KV-J21MN1AK)
	*	A-1298-518-A	A BOARD, COMPLETE (KV-J21PF1)
33	⚠	4-389-778-31	HOLDER, AC CORD
34	⚠	1-574-062-61	CORD, POWER (WITH CONNECTOR) 2.5A/250V
35		1-452-032-00	MAGNET,DISC
36		X-4309-608-8	PERMALLOY ASSY, CONVERGENCE
37	*	A-1331-799-A	C BOARD, COMPLETE (EXCEPT FOR KV-J21MF3)
	*	A-1331-697-A	C BOARD, COMPLETE (KV-J21MF3)
38	*	A-1380-580-A	K BOARD, COMPLETE (KV-J21MF1AK/J21MN1AK ONLY)
39	*	A-1380-581-A	K1 BOARD, COMPLETE (KV-J21MF1AK/J21MN1AK ONLY)
40		4-302-404-03	SCREW (WASHER HEAD) (+P 4X16)

7-2. 3D Speaker (KV-J21MF1AK/J21MN1AK only)

■ : BVTP4 × 16 7-685-663-71



REF.NO.	PART NO.	DESCRIPTION	REMARK
101	A-1501-280-A	BOX ASSY, SPEAKER	
102	1-505-892-11	SPEAKER (10CM)	

SECTION 8
ELECTRICAL PARTS LIST

A (KV-J21MF1AK / KV-J21MN1AK)

NOTE:

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board name.

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

RESISTORS
- All resistors are in ohms
- F : nonflammable

CAPACITORS
- MF : µF, PF : µµF

COILS
- MMH : µH, UH : µH

REF.NO.	PART NO.	DESCRIPTION			REMARK
*	A-1298-554-A	A BOARD, COMPLETE (KV-J21MF1AK)			
		**********			
*	A-1298-552-A	A BOARD, COMPLETE (KV-J21MN1AK)			
		**********			
*	1-535-893-11	TERMINAL,FASTEN(POSITIVE LOCK)			
*	1-580-798-11	CONNECTOR PIN (DY) 6P			
*	3-691-950-11	SPACER, P.C.BOARD			
	4-382-854-11	SCREW (M3X10), P, SW (+)			
		<CAPACITOR>			
C001	1-102-119-00	CERAMIC	0.0015MF	10%	50V
C002	1-126-965-11	ELECT	22MF	20%	50V
C003	1-102-973-00	CERAMIC	100PF	5%	50V
C004	1-125-800-51	ELECT	2.2MF	20%	63V
C007	1-125-798-51	ELECT	0.47MF	20%	63V
C009	1-102-824-00	CERAMIC	470PF	5%	50V
C010	1-136-157-00	FILM	0.022MF	5%	50V
C011	1-125-794-51	ELECT	47MF	20%	16V
C012	1-102-973-00	CERAMIC	100PF	5%	50V
C015	1-101-884-00	CERAMIC	56PF	5%	50V
C016	1-101-884-00	CERAMIC	56PF	5%	50V
C017	1-102-973-00	CERAMIC	100PF	5%	50V
C018	1-102-973-00	CERAMIC	100PF	5%	50V
C021	1-102-074-00	CERAMIC	0.001MF	10%	50V
C022	1-102-074-00	CERAMIC	0.001MF	10%	50V
C023	1-102-074-00	CERAMIC	0.001MF	10%	50V
C024	1-102-074-00	CERAMIC	0.001MF	10%	50V
C025	1-102-074-00	CERAMIC	0.001MF	10%	50V
C026	1-102-074-00	CERAMIC	0.001MF	10%	50V
C027	1-102-074-00	CERAMIC	0.001MF	10%	50V
C034	1-136-165-00	FILM	0.1MF	5%	50V
C042	1-102-973-00	CERAMIC	100PF	5%	50V
C044	1-102-973-00	CERAMIC	100PF	5%	50V
C046	1-102-973-00	CERAMIC	100PF	5%	50V
C048	1-136-165-00	FILM	0.1MF	5%	50V
C049	1-136-165-00	FILM	0.1MF	5%	50V
C050	1-126-960-11	ELECT	1MF	20%	50V
C052	1-136-165-00	FILM	0.1MF	5%	50V
C053	1-102-074-00	CERAMIC	0.001MF	10%	50V
C055	1-126-935-11	ELECT	470MF	20%	16V
C056	1-102-074-00	CERAMIC	0.001MF	10%	50V
C057	1-102-852-91	CERAMIC	47PF	5%	50V
C058	1-102-973-00	CERAMIC	100PF	5%	50V
C059	1-102-973-00	CERAMIC	100PF	5%	50V
C060	1-102-074-00	CERAMIC	0.001MF	10%	50V

REF.NO.	PART NO.	DESCRIPTION			REMARK
C061	1-125-800-51	ELECT	2.2MF	20%	63V
C072	1-126-935-11	ELECT	470MF	20%	16V
C074	1-102-110-00	CERAMIC	220PF	10%	50V
C101	1-101-003-00	CERAMIC	0.0047MF		50V
C102	1-136-165-00	FILM	0.1MF	5%	50V
C105	1-125-806-51	ELECT	220MF	20%	16V
C106	1-125-797-51	ELECT	10MF	20%	50V
C108	1-125-807-51	ELECT	1000MF	20%	16V
C109	1-102-125-00	CERAMIC	0.0047MF	10%	50V
C111	1-102-074-00	CERAMIC	0.001MF	10%	50V
C114	1-102-973-00	CERAMIC	100PF	5%	50V
C115	1-102-947-00	CERAMIC	10PF	0.5PF	50V
C116	1-136-165-00	FILM	0.1MF	5%	50V
C117	1-102-973-00	CERAMIC	100PF	5%	50V
C118	1-126-965-11	ELECT	22MF	20%	50V
C119	1-136-153-00	FILM	0.01MF	5%	50V
C120	1-130-493-00	MYLAR	0.068MF	5%	50V
C121	1-130-493-00	MYLAR	0.068MF	5%	50V
C122	1-125-804-51	ELECT	100MF	20%	16V
C124	1-136-165-00	FILM	0.1MF	5%	50V
C125	1-136-165-00	FILM	0.1MF	5%	50V
C233	1-125-794-51	ELECT	47MF	20%	16V
C234	1-125-794-51	ELECT	47MF	20%	16V
C235	1-125-804-51	ELECT	100MF	20%	16V
C236	1-126-948-11	ELECT	100MF	20%	35V
C237	1-125-804-51	ELECT	100MF	20%	16V
C238	1-137-188-51	FILM	0.15MF	5%	50V
C239	1-125-804-51	ELECT	100MF	20%	16V
C240	1-137-188-51	FILM	0.15MF	5%	50V
C241	1-125-813-51	ELECT	1000MF	20%	25V
C242	1-136-153-00	FILM	0.01MF	5%	50V
C243	1-125-797-51	ELECT	10MF	20%	50V
C244	1-125-813-51	ELECT	1000MF	20%	25V
C246	1-128-551-11	ELECT	22MF	20%	25V
C247	1-125-813-51	ELECT	1000MF	20%	25V
C253	1-125-804-51	ELECT	100MF	20%	16V
C254	1-130-480-00	MYLAR	0.0056MF	5%	50V
C255	1-130-480-00	MYLAR	0.0056MF	5%	50V
C257	1-136-175-00	FILM	0.68MF	5%	50V
C258	1-136-175-00	FILM	0.68MF	5%	50V
C300	1-125-794-51	ELECT	47MF	20%	16V
C304	1-136-165-00	FILM	0.1MF	5%	50V
C305	1-136-165-00	FILM	0.1MF	5%	50V
C306	1-136-165-00	FILM	0.1MF	5%	50V
C307	1-136-165-00	FILM	0.1MF	5%	50V
C308	1-136-165-00	FILM	0.1MF	5%	50V
C309	1-136-165-00	FILM	0.1MF	5%	50V

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

A (KV-J21MF1AK / KV-J21MN1AK)

REF. NO.	PART NO.	DESCRIPTION			REMARK
C310	1-136-165-00	FILM	0.1MF	5%	50V
C311	1-102-951-00	CERAMIC	15PF	5%	50V
C312	1-102-951-00	CERAMIC	15PF	5%	50V
C313	1-125-804-51	ELECT	100MF	20%	16V
C314	1-102-121-00	CERAMIC	0.0022MF	10%	50V
C315	1-126-960-11	ELECT	1MF	20%	50V
C316	1-102-125-00	CERAMIC	0.0047MF	10%	50V
C319	1-136-165-00	FILM	0.1MF	5%	50V
C320	1-136-165-00	FILM	0.1MF	5%	50V
C321	1-136-165-00	FILM	0.1MF	5%	50V
C323	1-101-880-00	CERAMIC	47PF	5%	50V
C324	1-125-800-51	ELECT	2.2MF	20%	63V
C325	1-102-947-00	CERAMIC	10PF	0.5PF	50V
C326	1-102-949-00	CERAMIC	12PF	5%	50V
C327	1-102-947-00	CERAMIC	10PF	0.5PF	50V
C328	1-136-153-00	FILM	0.01MF	5%	50V
C329	1-130-478-00	MYLAR	0.0039MF	5%	50V
C330	1-136-165-00	FILM	0.1MF	5%	50V
C331	1-125-797-51	ELECT	10MF	20%	50V
C332	1-136-165-00	FILM	0.1MF	5%	50V
C333	1-136-165-00	FILM	0.1MF	5%	50V
C334	1-102-123-00	CERAMIC	0.0033MF	10%	50V
C335	1-102-973-00	CERAMIC	100PF	5%	50V
C336	1-125-797-51	ELECT	10MF	20%	50V
C337	1-125-804-51	ELECT	100MF	20%	16V
C339	1-101-361-00	CERAMIC	150PF	5%	50V
C340	1-102-074-00	CERAMIC	0.001MF	10%	50V
C341	1-102-973-00	CERAMIC	100PF	5%	50V
C342	1-136-165-00	FILM	0.1MF	5%	50V
C344	1-125-797-51	ELECT	10MF	20%	50V
C349	1-125-797-51	ELECT	10MF	20%	50V
C350	1-125-794-51	ELECT	47MF	20%	16V
C351	1-136-165-00	FILM	0.1MF	5%	50V
C352	1-136-169-00	FILM	0.22MF	5%	50V
C358	1-136-165-00	FILM	0.1MF	5%	50V
C359	1-125-804-51	ELECT	100MF	20%	16V
C361	1-102-074-00	CERAMIC	0.001MF	10%	50V
C362	1-162-211-31	CERAMIC	33PF	5%	50V
C367	1-136-165-00	FILM	0.1MF	5%	50V
C368	1-136-165-00	FILM	0.1MF	5%	50V
C369	1-136-165-00	FILM	0.1MF	5%	50V
C370	1-136-165-00	FILM	0.1MF	5%	50V
C374	1-126-967-11	ELECT	47MF	20%	50V
C375	1-126-967-11	ELECT	47MF	20%	50V
C401	1-101-004-00	CERAMIC (KV-J21MN1AK)	0.01MF		50V
C402	1-136-153-00	FILM	0.01MF	5%	50V
C403	1-126-968-11	ELECT	100MF	20%	50V
C404	1-101-004-00	CERAMIC (KV-J21MN1AK)	0.01MF		50V
C405	1-102-125-00	CERAMIC	0.0047MF	10%	50V
C406	1-102-125-00	CERAMIC	0.0047MF	10%	50V
C407	1-102-125-00	CERAMIC	0.0047MF	10%	50V
C408	1-102-125-00	CERAMIC	0.0047MF	10%	50V
C410	1-102-961-00	CERAMIC	27PF	5%	50V
C423	1-102-820-00	CERAMIC	330PF	5%	50V
C425	1-101-004-00	CERAMIC (KV-J21MN1AK)	0.01MF		50V

REF. NO.		PART NO.	DESCRIPTION			REMARK
C501		1-102-228-00	CERAMIC	470PF	10%	500V
C523		1-126-933-11	ELECT	100MF	20%	16V
C548		1-106-220-00	MYLAR	0.1MF	10%	100V
C551		1-126-948-11	ELECT	100MF	20%	35V
C552		1-126-948-11	ELECT	100MF	20%	35V
C553		1-102-127-00	CERAMIC	0.0068MF	10%	50V
C554		1-102-244-00	CERAMIC	220PF	10%	500V
C555		1-101-804-00	CERAMIC	10PF	5%	500V
C562		1-126-933-11	ELECT	100MF	20%	16V
C602		1-161-830-00	CERAMIC	0.0047MF	99%	500V
C603		1-161-830-00	CERAMIC	0.0047MF	99%	500V
C604		1-117-752-11	ELECT(BLOCK)	330MF	20%	450V
C605		1-161-830-00	CERAMIC	0.0047MF	99%	500V
C606		1-161-830-00	CERAMIC	0.0047MF	99%	500V
C607		1-161-830-00	CERAMIC	0.0047MF	99%	500V
C608		1-104-332-11	CERAMIC	470PF	10%	2KV
C609		1-124-347-00	ELECT	100MF	20%	160V
C610		1-126-943-11	ELECT	2200MF	20%	25V
C611	⚠	1-164-497-51	CERAMIC	470PF	10%	400V
C612		1-102-228-00	CERAMIC	470PF	10%	500V
C613		1-102-824-00	CERAMIC	470PF	5%	50V
C614		1-126-943-11	ELECT	2200MF	20%	25V
C616		1-102-228-00	CERAMIC	470PF	10%	500V
C618		1-102-114-00	CERAMIC	470PF	10%	50V
C619		1-162-116-00	CERAMIC	680PF	10%	2KV
C621	⚠	1-104-705-51	FILM	0.1MF	20%	250V
C622		1-107-368-11	MYLAR	0.047MF	99%	200V
C623		1-126-934-11	ELECT	220MF	20%	16V
C624		1-126-767-11	ELECT	1000MF	20%	16V
C625		1-102-074-00	CERAMIC	0.001MF	10%	50V
C627		1-162-116-00	CERAMIC	680PF	10%	2KV
C628		1-102-824-00	CERAMIC	470PF	5%	50V
C630	⚠	1-164-497-51	CERAMIC	470PF	10%	400V
C631		1-161-830-00	CERAMIC	0.0047MF	99%	500V
C632	⚠	1-164-497-51	CERAMIC	470PF	10%	400V
C633		1-161-754-00	CERAMIC	0.001MF	10%	3KV
C634		1-102-114-00	CERAMIC	470PF	10%	50V
C801		1-123-024-21	ELECT	33MF		160V
C802		1-107-364-11	MYLAR	0.01MF	10%	200V
C804		1-102-074-00	CERAMIC	0.001MF	10%	50V
C805		1-102-244-00	CERAMIC	220PF	10%	500V
C806		1-126-960-11	ELECT	1MF	20%	50V
C807		1-136-569-11	FILM	1.2MF	5%	200V
C808		1-129-746-00	FILM	0.039MF	5%	400V
C809		1-162-115-00	CERAMIC	330PF	10%	2KV
C810		1-106-365-00	MYLAR	0.0082MF	99%	200V
C811		1-162-318-11	CERAMIC	0.001MF	10%	500V
C812		1-136-081-00	FILM	0.012MF	3%	2KV
C816		1-107-636-11	ELECT	10MF	20%	160V
C820		1-161-754-00	CERAMIC	0.001MF	10%	2KV
C821		1-104-999-11	MYLAR	0.1MF	10%	200V
C822		1-136-111-00	FILM	1MF	5%	200V
C823		1-136-153-00	FILM	0.01MF	5%	50V
C825		1-107-364-11	MYLAR	0.01MF	10%	200V
C850		1-126-941-11	ELECT	470MF	20%	25V
C852		1-104-574-11	CERAMIC	0.0047MF	10%	2KV
C853		1-162-318-11	CERAMIC	0.001MF	10%	500V
C854		1-126-941-11	ELECT	470MF	20%	25V

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REF. NO.	PART NO.	DESCRIPTION			REMARK
C856	1-162-318-11	CERAMIC	0.001MF	10%	500V
C857	1-136-159-00	FILM	0.033MF	5%	50V
C860	1-102-228-00	CERAMIC	470PF	10%	500V
C861	1-107-654-11	ELECT	33MF	20%	250V
C875	1-128-562-11	ELECT	47MF	20%	100V
C876	1-107-369-11	MYLAR	0.068MF	10%	100V
C891	1-102-116-00	CERAMIC	680PF	10%	50V
C898	1-137-150-11	MYLAR	0.01MF	10%	100V
C901	1-102-824-00	CERAMIC	470PF	5%	50V
C902	1-102-824-00	CERAMIC	470PF	5%	50V
C1201	1-125-804-51	ELECT	100MF	20%	16V
C1202	1-136-165-00	FILM	0.1MF	5%	50V
C1203	1-136-165-00	FILM	0.1MF	5%	50V
C1204	1-125-804-51	ELECT	100MF	20%	16V
C1205	1-136-165-00	FILM	0.1MF	5%	50V
C1206	1-136-165-00	FILM	0.1MF	5%	50V
C1210	1-125-804-51	ELECT	100MF	20%	16V
C1213	1-126-960-11	ELECT	1MF	20%	50V
C1214	1-125-797-51	ELECT	10MF	20%	50V
C1215	1-102-976-00	CERAMIC	180PF	5%	50V
C1216	1-136-173-00	FILM	0.47MF	5%	50V
C1217	1-125-804-51	ELECT	100MF	20%	16V
C1218	1-102-976-00	CERAMIC	180PF	5%	50V
C1221	1-136-173-00	FILM	0.47MF	5%	50V
C1226	1-125-806-51	ELECT	220MF	20%	16V
C1230	1-136-165-00	FILM (KV-J21MF1AK)	0.1MF	5%	50V
C1259	1-102-124-00	CERAMIC	0.0039MF	10%	50V
C1260	1-102-124-00	CERAMIC	0.0039MF	10%	50V
C1513	1-126-968-11	ELECT	100MF	20%	50V
		<CONNECTOR>			
CN101 *	1-560-124-00	PLUG, CONNECTOR (2.5MM) 4P			
CN103 *	1-564-509-11	PLUG, CONNECTOR 6P			
CN111 *	1-564-505-11	PLUG, CONNECTOR 2P			
CN251 *	1-564-507-11	PLUG, CONNECTOR 4P			
CN601 *	1-580-843-11	PIN, CONNECTOR (POWER)			
CN602 *	1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P			
CN603 *	1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P			
CN604	1-695-915-11	TAB (CONTACT)			
CN605	1-695-915-11	TAB (CONTACT)			
CN606	1-695-915-11	TAB (CONTACT)			
CN607	1-695-915-11	TAB (CONTACT)			
CN608	1-564-506-11	PLUG, CONNECTOR 3P			
CN609 *	1-564-506-11	PLUG, CONNECTOR 3P			
CN612	1-695-915-11	TAB (CONTACT)			
CN613	1-695-915-11	TAB (CONTACT)			
CN614	1-695-915-11	TAB (CONTACT)			
CN615	1-695-915-11	TAB (CONTACT)			
CN851	1-508-766-00	PIN, CONNECTOR (5MM PITCH) 4P			
		<FILTER>			
CF55	1-567-099-00	FILTER, CERAMIC (KV-J21MF1AK)			

REF. NO.	PART NO.	DESCRIPTION	REMARK
		<COMPOSITION CIRCUIT BLOCK>	
CP001	1-233-747-11	CIRCUIT BLOCK, COMPOSITION	
CP002	1-233-749-11	CIRCUIT BLOCK, COMPOSITION	
CP003	1-233-748-11	CIRCUIT BLOCK, COMPOSITION	
CP004	1-233-750-11	CIRCUIT BLOCK, COMPOSITION	
CP005	1-233-749-11	CIRCUIT BLOCK, COMPOSITION	
		<TRIMMER>	
CT55	1-404-801-11	TRAP, CERAMIC	
		<DIODE>	
D001	8-719-109-81	DIODE RD4.7ESB2	
D002	8-719-911-19	DIODE 1SS119-25	
D003	8-719-911-19	DIODE 1SS119-25	
D005	8-719-109-84	DIODE RD5.1ESB1	
D008	8-719-109-89	DIODE RD5.6ESB2	
D103	8-719-016-42	DIODE MC932	
D251	8-719-911-19	DIODE 1SS119-25	
D252	8-719-016-42	DIODE MC932	
D301	8-719-911-19	DIODE 1SS119-25	
D305	8-719-911-19	DIODE 1SS119-25	
D306	8-719-911-19	DIODE 1SS119-25	
D307	8-719-911-19	DIODE 1SS119-25	
D308	8-719-109-54	DIODE RD2.2ESB2	
D310	8-719-911-19	DIODE 1SS119-25	
D311	8-719-109-54	DIODE RD2.2ESB2	
D312	8-719-110-08	DIODE RD8.2ESB2	
D315	8-719-121-24	DIODE RD9.1ESL	
D351	8-719-908-03	DIODE GP08D	
D399	8-719-121-24	DIODE RD9.1ESL	
D401	8-719-911-19	DIODE 1SS119-25	
D403	8-719-911-19	DIODE 1SS119-25	
D513	8-719-109-84	DIODE RD5.1ESB1	
D551	8-719-908-03	DIODE GP08D	
D561	8-719-911-19	DIODE 1SS119-25	
D591	8-719-911-19	DIODE 1SS119-25	
D601	8-719-510-53	DIODE D4SB60L	
D604	8-719-301-64	DIODE RU4DS	
D605	8-719-067-18	DIODE RN4Z	
D606	8-719-510-73	DIODE S3L20UF4	
D607	8-719-510-26	DIODE D1NL20-TA	
D609	8-719-510-26	DIODE D1NL20-TA	
D610	8-719-510-26	DIODE D1NL20-TA	
D611	8-719-510-26	DIODE D1NL20-TA	
D801	8-719-945-80	DIODE ERC06-15S	
D802	8-719-900-26	DIODE ERD29-08J	
D851	8-719-302-43	DIODE EL1Z	
D852	8-719-028-72	DIODE RGP02-17EL-6433	
D853	8-719-302-43	DIODE EL1Z	
D855	8-719-302-43	DIODE EL1Z	
D857	8-719-908-03	DIODE GP08D	
D858	8-719-908-03	DIODE GP08D	
D860	8-719-911-19	DIODE 1SS119-25	
D901	8-719-054-60	DIODE LNK0220022G	
D1201	8-719-121-24	DIODE RD9.1ESL	
D1202	8-719-121-24	DIODE RD9.1ESL	

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

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REF. NO.		PART NO.	DESCRIPTION	REMARK
D1203		8-719-121-24	DIODE RD9.1ESL	
D1207		8-719-121-24	DIODE RD9.1ESL	
D1208		8-719-121-24	DIODE RD9.1ESL	
D1504		8-719-911-19	DIODE 1SS119-25	
D1505		8-719-109-81	DIODE RD4.7ESB2	
			<FUSE>	
F601	⚠	1-532-237-11	FUSE, TIME-LAG (BET) 3.15A/250V	
			<FERRITE BEAD>	
FB101		1-410-397-21	FERRITE 1.1UH	
FB102		1-410-397-21	FERRITE 1.1UH	
FB251		1-410-397-21	FERRITE 1.1UH	
FB601		1-410-397-21	FERRITE 1.1UH	
FB603		1-410-397-21	FERRITE 1.1UH	
FB610		1-410-396-41	FERRITE 0.45UH	
FB612		1-410-397-21	FERRITE 1.1UH	
FB801		1-410-397-21	FERRITE 1.1UH	
			<FUSE CLIP>	
FH01		1-533-223-11	CLIP, FUSE	
FH02		1-533-223-11	CLIP, FUSE	
			<IC>	
IC001		8-752-889-58	IC CXP85220A-055S (KV-J21MF1AK)	
IC001		8-752-893-68	IC CXP85224A-062S (KV-J21MN1AK)	
IC002		8-759-805-37	IC L78LR05D-MA	
IC003		8-759-370-34	IC ST24C08FB6	
IC004		8-742-041-12	HYB IC SBX1981-11(12)	
IC102		8-759-157-40	IC UPC574J	
IC203		8-759-336-30	IC TA8223K	
IC300		8-759-365-26	IC TDA8375A	
IC351		8-759-288-85	IC TDA4665T-T	
IC354		8-759-251-56	IC TDA8395T	
IC521		8-759-195-63	IC PQ09RE11	
IC551		8-759-801-98	IC LA7830	
IC601		8-749-014-00	IC STR-S6707N	
IC602		8-749-921-89	IC SE115N	
IC603	⚠	8-749-010-64	PHOTO COUPLER PC123F2	
IC801		8-759-145-58	IC UPC4558C	
IC1203		8-759-701-75	IC NJM7805FA	
IC1210		8-759-145-58	IC UPC4558C	
			<JACK>	
J251		1-770-786-11	JACK	
J1201		1-770-661-11	JACK BLOCK, PIN 6P	
J1202		1-695-585-11	JACK BLOCK, PIN (L TYPE) 3P	
			<COIL>	
L001		1-408-397-00	INDUCTOR 1UH	
L002		1-410-509-51	INDUCTOR 10UH	
L003		1-408-605-31	INDUCTOR 15UH	

REF. NO.	PART NO.	DESCRIPTION	REMARK
L101	1-410-470-11	INDUCTOR 10UH	
L301	1-408-598-31	INDUCTOR 3.9UH	
L401	1-410-498-11	INDUCTOR 1.2UH	
L402	1-410-510-11	INDUCTOR 12UH	
L406	1-410-507-11	INDUCTOR 6.8UH	
L410	1-410-501-51	INDUCTOR 2.2UH	
L802	1-412-527-11	INDUCTOR 15UH	
L804	1-459-075-00	INDUCTOR 0UH	
L805	1-459-769-13	COIL, HORIZONTAL LINEARITY	
L807	1-459-390-00	INDUCTOR 0UH	
L808	1-412-553-11	INDUCTOR 3.3MMH	
L821	1-459-111-00	INDUCTOR 0UH	
L850	1-408-947-00	INDUCTOR 2.2MMH	
		<TRANSISTOR>	
Q030	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q108	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q109	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q110	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q202	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q207	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q208	8-729-030-02	TRANSISTOR DTC144ESA	
Q209	8-729-029-92	TRANSISTOR DTC143ESA	
Q210	8-729-029-92	TRANSISTOR DTC143ESA	
Q301	8-729-029-66	TRANSISTOR DTC114ESA	
Q302	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q303	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q401	8-729-119-78	TRANSISTOR 2SC2785-HFE (KV-J21MN1AK)	
Q402	8-729-922-66	TRANSISTOR 2SC2410SN	
Q403	8-729-029-92	TRANSISTOR DTC143ESA	
Q404	8-729-029-92	TRANSISTOR DTC143ESA	
Q406	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q408	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q409	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q414	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q417	8-729-029-92	TRANSISTOR DTC143ESA	
Q561	8-729-200-17	TRANSISTOR 2SA1091-R	
Q801	8-729-140-50	TRANSISTOR 2SC3209LK	
Q802	8-729-821-87	TRANSISTOR 2SD1878-CA	
Q821	8-729-209-15	TRANSISTOR 2SD2012	
Q902	8-729-030-02	TRANSISTOR DTC144ESA	
Q903	8-729-030-02	TRANSISTOR DTC144ESA	
Q1201	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1202	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1203	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1204	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q1207	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1208	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1209	8-729-119-78	TRANSISTOR 2SC2785-HFE (KV-J21MF1AK)	
Q1264	8-729-029-92	TRANSISTOR DTC143ESA (KV-J21MN1AK)	
Q1265	8-729-029-92	TRANSISTOR DTC143ESA (KV-J21MN1AK)	
Q1513	8-729-119-78	TRANSISTOR 2SC2785-HFE	

A (KV-J21MF1AK / KV-J21MN1AK)

REF. NO.	PART NO.	DESCRIPTION			REMARK
		<RESISTOR>			
R007	1-247-855-31	CARBON	10K	5%	1/4W
R008	1-220-958-81	METAL	1K	5%	1/2W
R009	1-220-958-81	METAL	1K	5%	1/2W
R010	1-220-958-81	METAL	1K	5%	1/2W
R012	1-249-401-11	CARBON	47	5%	1/4W
R013	1-220-958-81	METAL	1K	5%	1/2W
R014	1-220-958-81	METAL	1K	5%	1/2W
R015	1-247-825-31	CARBON	560	5%	1/4W
R016	1-220-958-81	METAL	1K	5%	1/2W
R017	1-220-961-81	METAL	2.2K	5%	1/2W
R018	1-249-409-11	CARBON	220	5%	1/4W
R019	1-247-883-00	CARBON	150K	5%	1/4W
R021	1-247-847-31	CARBON	4.7K	5%	1/4W
R025	1-220-961-81	METAL	2.2K	5%	1/2W
R026	1-220-961-81	METAL	2.2K	5%	1/2W
R027	1-247-847-31	CARBON	4.7K	5%	1/4W
R028	1-247-807-31	CARBON	100	5%	1/4W
R029	1-247-847-31	CARBON	4.7K	5%	1/4W
R031	1-220-958-81	METAL	1K	5%	1/2W
R032	1-220-961-81	METAL (KV-J21MN1AK)	2.2K	5%	1/2W
R033	1-220-958-81	METAL	1K	5%	1/2W
R035	1-220-958-81	METAL	1K	5%	1/2W
R036	1-220-958-81	METAL	1K	5%	1/2W
R038	1-249-409-11	CARBON	220	5%	1/4W
R040	1-249-409-11	CARBON	220	5%	1/4W
R041	1-247-807-31	CARBON	100	5%	1/4W
R042	1-249-412-11	CARBON	390	5%	1/4W
R045	1-220-961-81	METAL	2.2K	5%	1/2W
R047	1-247-807-31	CARBON	100	5%	1/4W
R048	1-247-807-31	CARBON	100	5%	1/4W
R053	1-220-961-81	METAL	2.2K	5%	1/2W
R054	1-247-855-31	CARBON	10K	5%	1/4W
R057	1-220-958-81	METAL	1K	5%	1/2W
R060	1-249-411-11	CARBON	330	5%	1/4W
R061	1-220-961-81	METAL	2.2K	5%	1/2W
R062	1-220-961-81	METAL	2.2K	5%	1/2W
R063	1-220-961-81	METAL	2.2K	5%	1/2W
R065	1-249-409-11	CARBON	220	5%	1/4W
R066	1-249-409-11	CARBON	220	5%	1/4W
R068	1-247-807-31	CARBON	100	5%	1/4W
R071	1-249-411-11	CARBON	330	5%	1/4W
R076	1-247-807-31	CARBON	100	5%	1/4W
R077	1-247-807-31	CARBON	100	5%	1/4W
R090	1-247-855-31	CARBON	10K	5%	1/4W
R101	1-247-847-31	CARBON	4.7K	5%	1/4W
R102	1-220-958-81	METAL	1K	5%	1/2W
R113	1-249-433-11	CARBON	22K	5%	1/4W
R114	1-247-823-31	CARBON	470	5%	1/4W
R115	1-249-433-11	CARBON	22K	5%	1/4W
R116	1-249-433-11	CARBON	22K	5%	1/4W
R117	1-249-433-11	CARBON	22K	5%	1/4W
R118	1-249-433-11	CARBON	22K	5%	1/4W
R119	1-220-960-81	METAL	1.8K	5%	1/2W
R120	1-247-891-00	CARBON	330K	5%	1/4W
R131	1-216-464-11	METAL OXIDE	18K	5%	2W F

REF. NO.	PART NO.	DESCRIPTION			REMARK
R180	1-249-409-11	CARBON	220	5%	1/4W
R181	1-249-409-11	CARBON	220	5%	1/4W
R182	1-249-409-11	CARBON	220	5%	1/4W
R241	1-249-411-11	CARBON	330	5%	1/4W
R242	1-249-411-11	CARBON	330	5%	1/4W
R243	1-247-855-31	CARBON	10K	5%	1/4W
R244	1-247-855-31	CARBON	10K	5%	1/4W
R245	1-249-426-11	CARBON	5.6K	5%	1/4W
R246	1-249-426-11	CARBON	5.6K	5%	1/4W
R247	1-220-959-81	METAL	1.5K	5%	1/2W
R248	1-220-959-81	METAL	1.5K	5%	1/2W
R249	1-220-958-81	METAL	1K	5%	1/2W
R250	1-220-958-81	METAL	1K	5%	1/2W
R252	1-249-411-11	CARBON	330	5%	1/4W
R253	1-247-855-31	CARBON	10K	5%	1/4W
R254	1-249-389-11	CARBON	4.7	5%	1/4W
R255	1-249-389-11	CARBON	4.7	5%	1/4W
R256	1-249-411-11	CARBON	330	5%	1/4W
R264	1-220-963-81	METAL	3.3K	5%	1/2W
R265	1-220-963-81	METAL	3.3K	5%	1/2W
R266	1-249-437-11	CARBON	47K	5%	1/4W
R303	1-247-807-31	CARBON	100	5%	1/4W
R304	1-247-807-31	CARBON	100	5%	1/4W
R305	1-247-807-31	CARBON	100	5%	1/4W
R306	1-247-807-31	CARBON	100	5%	1/4W
R307	1-247-807-31	CARBON	100	5%	1/4W
R308	1-249-409-11	CARBON	220	5%	1/4W
R309	1-249-409-11	CARBON	220	5%	1/4W
R310	1-249-441-11	CARBON	100K	5%	1/4W
R311	1-249-430-11	CARBON	12K	5%	1/4W
R312	1-247-807-31	CARBON	100	5%	1/4W
R313	1-220-963-81	METAL	3.3K	5%	1/2W
R316	1-247-847-31	CARBON	4.7K	5%	1/4W
R317	1-220-958-81	METAL	1K	5%	1/2W
R318	1-220-978-81	METAL	120K	5%	1/2W
R319	1-259-877-11	CARBON	1.2M	5%	1/4W
R320	1-249-434-11	CARBON	27K	5%	1/4W
R321	1-215-459-00	METAL	39K	1%	1/4W
R322	1-249-434-11	CARBON	27K	5%	1/4W
R326	1-249-424-11	CARBON	3.9K	5%	1/4W
R330	1-247-825-31	CARBON	560	5%	1/4W
R331	1-247-897-11	CARBON	560K	5%	1/4W
R332	1-249-409-11	CARBON	220	5%	1/4W
R334	1-247-823-31	CARBON	470	5%	1/4W
R335	1-247-855-31	CARBON	10K	5%	1/4W
R336	1-220-961-81	METAL	2.2K	5%	1/2W
R339	1-215-408-00	METAL	300	1%	1/4W
R340	1-249-411-11	CARBON	330	5%	1/4W
R341	1-220-958-81	METAL	1K	5%	1/2W
R344	1-259-880-11	CARBON	2.2M	5%	1/4W
R351	1-249-393-11	CARBON	10	5%	1/4W
R355	1-249-393-11	CARBON	10	5%	1/4W
R356	1-220-958-81	METAL	1K	5%	1/2W
R360	1-259-884-11	CARBON	4.7M	5%	1/4W
R401	1-249-435-11	CARBON (KV-J21MN1AK)	33K	5%	1/4W

A (KV-J21MF1AK / KV-J21MN1AK)

REF. NO.	PART NO.	DESCRIPTION			REMARK	
R402	1-249-433-11	CARBON (KV-J21MN1AK)	22K	5%	1/4W	
R403	1-220-946-81	METAL	68	5%	1/2W	
R404	1-249-410-11	CARBON (KV-J21MN1AK)	270	5%	1/4W	
R406	1-247-847-31	CARBON	4.7K	5%	1/4W	
R407	1-249-424-11	CARBON	3.9K	5%	1/4W	
R408	1-220-960-81	METAL	1.8K	5%	1/2W	
R409	1-247-807-31	CARBON	100	5%	1/4W	
R410	1-247-855-31	CARBON	10K	5%	1/4W	
R411	1-220-961-81	METAL	2.2K	5%	1/2W	
R412	1-249-427-11	CARBON	6.8K	5%	1/4W	
R413	1-220-961-81	METAL	2.2K	5%	1/2W	
R414	1-247-823-31	CARBON	470	5%	1/4W	
R416	1-249-409-11	CARBON	220	5%	1/4W	
R419	1-220-958-81	METAL	1K	5%	1/2W	
R420	1-249-412-11	CARBON	390	5%	1/4W	
R421	1-249-409-11	CARBON	220	5%	1/4W	
R424	1-220-961-81	METAL	2.2K	5%	1/2W	
R425	1-249-412-11	CARBON	390	5%	1/4W	
R426	1-249-407-11	CARBON	150	5%	1/4W	
R429	1-249-412-11	CARBON	390	5%	1/4W	
R433	1-249-433-11	CARBON	22K	5%	1/4W	
R434	1-247-823-31	CARBON	470	5%	1/4W	
R440	1-249-407-11	CARBON	150	5%	1/4W	
R441	1-220-946-81	METAL (KV-J21MN1AK)	68	5%	1/2W	
R521	1-249-417-11	CARBON	1K	5%	1/4W	
R552	1-247-883-00	CARBON	150K	5%	1/4W	
R553	1-249-433-11	CARBON	22K	5%	1/4W	
R554	1-102-074-00	CERAMIC	0.001MF	10%	50V	
R555	1-247-855-31	CARBON	10K	5%	1/4W	
R556	1-249-417-11	CARBON	1K	5%	1/4W	
R557	1-249-420-11	CARBON	1.8K	5%	1/4W	
R561	1-247-839-31	CARBON	2.2K	5%	1/4W	
R562	1-249-419-11	CARBON	1.5K	5%	1/4W	F
R563	1-260-126-11	CARBON	180K	5%	1/2W	
R564	1-249-438-11	CARBON	56K	5%	1/4W	
R565	1-249-438-11	CARBON	56K	5%	1/4W	
R566	1-247-847-31	CARBON	4.7K	5%	1/4W	
R569	1-260-354-71	CARBON	150K	5%	1/2W	
R571	1-249-409-11	CARBON	220	5%	1/4W	
R601	1-202-968-11	CEMENTED	1.2	5%	10W	
R602	1-202-968-11	CEMENTED	1.2	5%	10W	
R606	1-215-915-11	METAL OXIDE	470	5%	3W	F
R610	1-215-924-00	METAL OXIDE	15K	5%	3W	F
R611	1-202-933-61	FUSIBLE	0.1	10%	1/2W	F
R612	1-249-377-11	CARBON (KV-J21MF1AK)	0.47	5%	1/4W	
R612	1-219-134-11	FUSIBLE (KV-J21MN1AK)	0.1	10%	1/4W	
R613	1-249-377-11	CARBON (KV-J21MF1AK)	0.47	5%	1/4W	
R613	1-219-134-11	FUSIBLE (KV-J21MN1AK)	0.1	10%	1/4W	
R614	1-215-877-11	METAL OXIDE	22K	5%	1W	F
R615	1-249-401-11	CARBON	47	5%	1/4W	
R616	1-247-289-00	CARBON	8.2M	5%	1W	
R617	1-215-924-00	METAL OXIDE	15K	5%	3W	F
R618	1-219-134-11	FUSIBLE	0.1	10%	1/4W	
R619	1-219-134-11	FUSIBLE	0.1	10%	1/4W	
R622	1-217-192-21	METAL	0.22	10%	2W	
R623	1-247-807-31	CARBON	100	5%	1/4W	
R624	1-216-446-00	METAL OXIDE	18	5%	2W	F
R625	1-249-424-11	CARBON	3.9K	5%	1/4W	
R626	1-249-420-11	CARBON	1.8K	5%	1/4W	
R627	1-249-417-11	CARBON	1K	5%	1/4W	
R628	1-249-417-11	CARBON	1K	5%	1/4W	
R629	1-249-399-11	CARBON	33	5%	1/4W	
R632	1-249-381-11	CARBON	1	5%	1/4W	
R636	1-215-924-00	METAL OXIDE	15K	5%	3W	F
R801	1-215-920-11	METAL OXIDE	3.3K	5%	3W	F
R802	1-249-385-11	CARBON	2.2	5%	1/4W	F
R803	1-247-839-31	CARBON	2.2K	5%	1/4W	
R804	1-249-417-11	CARBON	1K	5%	1/4W	
R805	1-249-433-11	CARBON	22K	5%	1/4W	
R809	1-247-756-11	CARBON	2.2K	5%	1/2W	F
R811	1-216-343-00	METAL OXIDE	0.33	5%	1W	F
R812	1-215-447-00	METAL	12K	1%	1/4W	
R816	1-249-435-11	CARBON	33K	5%	1/4W	
R820	1-249-419-11	CARBON	1.5K	5%	1/4W	
R821	1-215-911-11	METAL OXIDE	100	5%	3W	F
R822	1-216-429-00	METAL OXIDE	270	5%	1W	F
R823	1-249-931-11	CARBON	2.2K	5%	1/4W	F
R825	1-249-392-11	CARBON	8.2	5%	1/4W	F
R826	1-249-422-11	CARBON	2.7K	5%	1/4W	
R827	1-249-440-11	CARBON	82K	5%	1/4W	
R828	1-249-424-11	CARBON	3.9K	5%	1/4W	
R829	1-249-419-11	CARBON	1.5K	5%	1/4W	
R831	1-215-863-11	METAL OXIDE	100	5%	1W	F
R832	1-247-839-31	CARBON	2.2K	5%	1/4W	
R834	1-247-855-31	CARBON	10K	5%	1/4W	
R851	1-249-382-11	CARBON	1.2	5%	1/4W	F
R852	1-249-923-11	CARBON	1K	5%	1/4W	F
R853	1-249-377-11	CARBON	0.47	5%	1/4W	F
R854	1-249-377-11	CARBON	0.47	5%	1/4W	F
R855	1-202-818-00	SOLID	1K	20%	1/2W	
R856	1-247-855-31	CARBON	10K	5%	1/4W	
R857	1-249-438-11	CARBON	56K	5%	1/4W	
R858	1-216-370-11	METAL OXIDE	1.2	5%	2W	F
R860	1-247-887-00	CARBON	220K	5%	1/4W	
R881	1-247-825-31	CARBON	560	5%	1/4W	
R882	1-249-422-11	CARBON	2.7K	5%	1/4W	
R883	1-247-903-00	CARBON	1M	5%	1/4W	
R895	1-216-349-00	METAL OXIDE	1	5%	1W	F
R898	1-247-839-31	CARBON	2.2K	5%	1/4W	
R902	1-247-847-31	CARBON	4.7K	5%	1/4W	
R904	1-247-847-31	CARBON	4.7K	5%	1/4W	
R905	1-220-958-81	METAL	1K	5%	1/2W	
R906	1-220-958-81	METAL	1K	5%	1/2W	
R907	1-220-960-81	METAL	1.8K	5%	1/2W	
R908	1-220-960-81	METAL	1.8K	5%	1/2W	
R909	1-220-963-81	METAL	3.3K	5%	1/2W	
R910	1-220-963-81	METAL	3.3K	5%	1/2W	

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

A (KV-J21MF1AK KV-J21MN1AK) **A (KV-J21MF3)**

REF. NO.		PART NO.	DESCRIPTION				REMARK
R911		1-249-428-11	CARBON	8.2K	5%	1/4W	
R913		1-247-823-31	CARBON	470	5%	1/4W	
R914		1-247-823-31	CARBON	470	5%	1/4W	
R915		1-249-428-11	CARBON	8.2K	5%	1/4W	
R1201		1-249-404-00	CARBON	82	5%	1/4W	
R1202		1-220-958-81	METAL	1K	5%	1/2W	
R1203		1-249-437-11	CARBON	47K	5%	1/4W	
R1204		1-249-437-11	CARBON	47K	5%	1/4W	
R1205		1-249-404-00	CARBON	82	5%	1/4W	
R1206		1-249-437-11	CARBON	47K	5%	1/4W	
R1207		1-249-437-11	CARBON	47K	5%	1/4W	
R1211		1-220-946-81	METAL	68	5%	1/2W	
R1212		1-220-958-81	METAL	1K	5%	1/2W	
R1213		1-220-958-81	METAL	1K	5%	1/2W	
R1214		1-247-895-00	CARBON	470K	5%	1/4W	
R1215		1-247-895-00	CARBON	470K	5%	1/4W	
R1216		1-247-895-00	CARBON	470K	5%	1/4W	
R1217		1-247-823-31	CARBON	470	5%	1/4W	
R1219		1-247-855-31	CARBON	10K	5%	1/4W	
R1220		1-220-958-81	METAL	1K	5%	1/2W	
R1221		1-247-855-31	CARBON	10K	5%	1/4W	
R1226		1-220-964-81	METAL	39K	5%	1/2W	
R1227		1-220-964-81	METAL	39K	5%	1/2W	
R1228		1-220-958-81	METAL	1K	5%	1/2W	
R1229		1-247-823-31	CARBON	470	5%	1/4W	
R1230		1-247-855-31	CARBON	10K	5%	1/4W	
R1231		1-220-958-81	METAL	1K	5%	1/2W	
R1232		1-249-424-11	CARBON	3.9K	5%	1/4W	
R1233		1-220-961-81	METAL	2.2K	5%	1/2W	
R1234		1-220-964-81	METAL	39K	5%	1/2W	
R1235		1-220-964-81	METAL	39K	5%	1/2W	
R1239		1-249-389-11	CARBON	4.7	5%	1/4W	F
R1240		1-247-807-31	CARBON	100	5%	1/4W	
R1241		1-220-958-81	METAL	1K	5%	1/2W	
R1243		1-247-807-31	CARBON	100	5%	1/4W	
R1246		1-249-411-11	CARBON	330	5%	1/4W	
R1247		1-247-823-31	CARBON	470	5%	1/4W	
R1248		1-220-958-81	METAL	1K	5%	1/2W	
R1249		1-247-823-31	CARBON	470	5%	1/4W	
R1250		1-247-901-11	CARBON (KV-J21MF1AK)	820K	5%	1/4W	
R1251		1-247-901-11	CARBON (KV-J21MF1AK)	820K	5%	1/4W	
R1252		1-220-961-81	METAL (KV-J21MF1AK)	2.2K	5%	1/2W	
R1253		1-249-418-11	METAL (KV-J21MF1AK)	1.2K	5%	1/4W	
R1513		1-247-855-31	CARBON	10K	5%	1/4W	
R1514		1-247-847-31	CARBON	4.7K	5%	1/4W	
R1515		1-247-807-31	CARBON	100	5%	1/4W	
			<SWITCH>				
S601	⚠	1-571-433-31	SWITCH, PUSH (AC POWER)				
S801		1-572-707-11	SWITCH, LEVER				
S901		1-570-577-41	SWITCH, PUSH				
S902		1-570-577-41	SWITCH, PUSH				
S903		1-570-577-41	SWITCH, PUSH				
S904		1-570-577-41	SWITCH, PUSH				
S905		1-570-577-41	SWITCH, PUSH				
			<SPARK GAP>				
SG801		1-519-422-11	GAP, SPARK				
			<SURFACE WAVE FILTER>				
SWF401		1-760-771-11	FILTER, SURFACE WAVE				
			<TRANSFORMER>				
T601	⚠	1-431-683-11	TRANSFORMER, CONVERTER (SRT)				
T605	⚠	1-431-383-21	TRANSFORMER, LINE FILTER				
T801		1-437-195-11	TRANSFORMER, HORIZONTAL DRIVE				
T851	⚠	1-453-193-21	TRANSFORMER ASSY, FLYBACK (NX-1742//M3A)				
			<THERMISTOR>				
THP601	⚠	1-808-059-31	THERMISTOR, POSITIVE				
			<TUNER>				
TU101	⚠	8-598-323-30	TUNER, VSS BT-AG401				
			<CRYSTAL>				
X101		1-577-082-11	VIBRATOR, CERAMIC				
X300		1-411-752-11	COIL				
X358		1-567-505-11	OSCILLATOR, CRYSTAL				
X443		1-567-504-11	OSCILLATOR, CRYSTAL				

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*	A-1298-517-A	A BOARD, COMPLETE (KV-J21MF3)				
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*	1-580-798-11	CONNECTOR PIN (DY) 6P				
*	3-691-950-11	SPACER, P.C.BOARD				
	4-382-854-11	SCREW (M3X10), P, SW (+)				
		<CAPACITOR>				
C001	1-102-119-00	CERAMIC	0.0015MF	10%	50V	
C002	1-126-965-11	ELECT	22MF	20%	50V	
C003	1-102-973-00	CERAMIC	100PF	5%	50V	
C004	1-126-961-11	ELECT	2.2MF	20%	50V	
C007	1-126-959-11	ELECT	0.47MF	20%	50V	
C009	1-102-824-00	CERAMIC	470PF	5%	50V	
C010	1-136-157-00	FILM	0.022MF	5%	50V	
C011	1-126-967-11	ELECT	47MF	20%	16V	
C012	1-102-973-00	CERAMIC	100PF	5%	50V	
C015	1-101-884-00	CERAMIC	56PF	5%	50V	
C016	1-101-884-00	CERAMIC	56PF	5%	50V	
C017	1-102-973-00	CERAMIC	100PF	5%	50V	

A (KV-J21MF3)

REF. NO.	PART NO.	DESCRIPTION			REMARK
C018	1-102-973-00	CERAMIC	100PF	5%	50V
C021	1-102-074-00	CERAMIC	0.001MF	10%	50V
C022	1-102-074-00	CERAMIC	0.001MF	10%	50V
C023	1-102-074-00	CERAMIC	0.001MF	10%	50V
C024	1-102-074-00	CERAMIC	0.001MF	10%	50V
C025	1-102-074-00	CERAMIC	0.001MF	10%	50V
C026	1-102-074-00	CERAMIC	0.001MF	10%	50V
C027	1-102-074-00	CERAMIC	0.001MF	10%	50V
C034	1-136-165-00	FILM	0.1MF	5%	50V
C042	1-102-973-00	CERAMIC	100PF	5%	50V
C044	1-102-973-00	CERAMIC	100PF	5%	50V
C046	1-102-973-00	CERAMIC	100PF	5%	50V
C048	1-136-165-00	FILM	0.1MF	5%	50V
C049	1-136-165-00	FILM	0.1MF	5%	50V
C050	1-126-960-11	ELECT	1MF	20%	50V
C052	1-136-165-00	FILM	0.1MF	5%	50V
C053	1-102-074-00	CERAMIC	0.001MF	10%	50V
C055	1-126-935-11	ELECT	470MF	20%	16V
C056	1-102-074-00	CERAMIC	0.001MF	10%	50V
C057	1-102-852-91	CERAMIC	47PF	5%	50V
C058	1-102-973-00	CERAMIC	100PF	5%	50V
C059	1-102-973-00	CERAMIC	100PF	5%	50V
C060	1-102-074-00	CERAMIC	0.001MF	10%	50V
C061	1-126-961-11	ELECT	2.2MF	20%	50V
C072	1-126-935-11	ELECT	470MF	20%	16V
C074	1-102-110-00	CERAMIC	220PF	10%	50V
C101	1-101-003-00	CERAMIC	0.0047MF		50V
C102	1-136-165-00	FILM	0.1MF	5%	50V
C105	1-126-934-11	ELECT	220MF	20%	16V
C106	1-126-964-51	ELECT	10MF	20%	50V
C108	1-126-767-11	ELECT	1000MF	20%	16V
C109	1-102-125-00	CERAMIC	0.0047MF	10%	50V
C111	1-102-074-00	CERAMIC	0.001MF	10%	50V
C114	1-102-973-00	CERAMIC	100PF	5%	50V
C115	1-102-947-00	CERAMIC	10PF	0.5PF	50V
C116	1-136-165-00	FILM	0.1MF	5%	50V
C117	1-102-973-00	CERAMIC	100PF	5%	50V
C118	1-126-965-11	ELECT	22MF	20%	50V
C119	1-136-153-00	FILM	0.01MF	5%	50V
C120	1-130-493-00	MYLAR	0.068MF	5%	50V
C121	1-130-493-00	MYLAR	0.068MF	5%	50V
C122	1-126-933-11	ELECT	100MF	20%	16V
C124	1-136-165-00	FILM	0.1MF	5%	50V
C125	1-136-165-00	FILM	0.1MF	5%	50V
C132	1-102-973-00	CERAMIC	100PF	5%	50V
C233	1-126-967-11	ELECT	47MF	20%	16V
C234	1-126-967-11	ELECT	47MF	20%	16V
C235	1-126-933-11	ELECT	100MF	20%	16V
C236	1-126-949-11	ELECT	220MF	20%	35V
C237	1-126-933-11	ELECT	100MF	20%	16V
C238	1-137-188-51	FILM	0.15MF	5%	50V
C239	1-126-933-11	ELECT	100MF	20%	16V
C240	1-137-188-51	FILM	0.15MF	5%	50V
C241	1-126-942-61	ELECT	1000MF	20%	25V
C242	1-136-153-00	FILM	0.01MF	5%	50V
C243	1-126-964-51	ELECT	10MF	20%	50V
C244	1-126-942-61	ELECT	1000MF	20%	25V
C246	1-128-551-11	ELECT	22MF	20%	25V

REF. NO.	PART NO.	DESCRIPTION			REMARK
C247	1-126-942-61	ELECT	1000MF	20%	25V
C253	1-126-933-11	ELECT	100MF	20%	16V
C254	1-136-153-00	FILM	0.01MF	5%	50V
C255	1-136-153-00	FILM	0.01MF	5%	50V
C257	1-136-165-00	FILM	0.1MF	5%	50V
C258	1-136-165-00	FILM	0.1MF	5%	50V
C300	1-126-967-11	ELECT	47MF	20%	16V
C304	1-136-165-00	FILM	0.1MF	5%	50V
C305	1-136-165-00	FILM	0.1MF	5%	50V
C306	1-136-165-00	FILM	0.1MF	5%	50V
C307	1-136-165-00	FILM	0.1MF	5%	50V
C308	1-136-165-00	FILM	0.1MF	5%	50V
C309	1-136-165-00	FILM	0.1MF	5%	50V
C310	1-136-165-00	FILM	0.1MF	5%	50V
C311	1-102-951-00	CERAMIC	15PF	5%	50V
C312	1-102-951-00	CERAMIC	15PF	5%	50V
C313	1-126-933-11	ELECT	100MF	20%	16V
C314	1-102-121-00	CERAMIC	0.0022MF	10%	50V
C315	1-126-960-11	ELECT	1MF	20%	50V
C316	1-102-125-00	CERAMIC	0.0047MF	10%	50V
C319	1-136-165-00	FILM	0.1MF	5%	50V
C320	1-136-165-00	FILM	0.1MF	5%	50V
C321	1-136-165-00	FILM	0.1MF	5%	50V
C323	1-101-880-00	CERAMIC	47PF	5%	50V
C324	1-126-961-11	ELECT	2.2MF	20%	50V
C325	1-102-947-00	CERAMIC	10PF	0.5PF	50V
C326	1-102-949-00	CERAMIC	12PF	5%	50V
C327	1-102-947-00	CERAMIC	10PF	0.5PF	50V
C328	1-136-165-00	FILM	0.1MF	5%	50V
C329	1-130-478-00	MYLAR	0.0039MF	5%	50V
C330	1-136-165-00	FILM	0.1MF	5%	50V
C331	1-126-964-51	ELECT	10MF	20%	50V
C332	1-136-165-00	FILM	0.1MF	5%	50V
C333	1-136-165-00	FILM	0.1MF	5%	50V
C334	1-102-123-00	CERAMIC	0.0033MF	10%	50V
C335	1-102-973-00	CERAMIC	100PF	5%	50V
C336	1-126-964-51	ELECT	10MF	20%	50V
C337	1-126-933-11	ELECT	100MF	20%	16V
C339	1-101-361-00	CERAMIC	150PF	5%	50V
C340	1-102-074-00	CERAMIC	0.001MF	10%	50V
C341	1-102-973-00	CERAMIC	100PF	5%	50V
C342	1-136-165-00	FILM	0.1MF	5%	50V
C344	1-126-964-51	ELECT	10MF	20%	50V
C349	1-126-964-51	ELECT	10MF	20%	50V
C350	1-126-967-11	ELECT	47MF	20%	16V
C351	1-136-165-00	FILM	0.1MF	5%	50V
C352	1-136-169-00	FILM	0.22MF	5%	50V
C358	1-136-165-00	FILM	0.1MF	5%	50V
C359	1-126-933-11	ELECT	100MF	20%	16V
C361	1-102-074-00	CERAMIC	0.001MF	10%	50V
C362	1-162-211-31	CERAMIC	33PF	5%	50V
C367	1-136-165-00	FILM	0.1MF	5%	50V
C368	1-136-165-00	FILM	0.1MF	5%	50V
C369	1-136-165-00	FILM	0.1MF	5%	50V
C370	1-136-165-00	FILM	0.1MF	5%	50V
C374	1-126-967-11	ELECT	47MF	20%	50V
C375	1-126-967-11	ELECT	47MF	20%	50V
C402	1-136-153-00	FILM	0.01MF	5%	50V

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

A (KV-J21MF3)

REF. NO.		PART NO.	DESCRIPTION			REMARK
C403		1-126-968-11	ELECT	100MF	20%	50V
C405		1-102-125-00	CERAMIC	0.0047MF	10%	50V
C406		1-102-125-00	CERAMIC	0.0047MF	10%	50V
C407		1-102-125-00	CERAMIC	0.0047MF	10%	50V
C408		1-102-125-00	CERAMIC	0.0047MF	10%	50V
C410		1-102-961-00	CERAMIC	27PF	5%	50V
C423		1-102-820-00	CERAMIC	330PF	5%	50V
C501		1-102-228-00	CERAMIC	470PF	10%	500V
C523		1-126-933-11	ELECT	100MF	20%	16V
C548		1-106-220-00	MYLAR	0.1MF	10%	100V
C551		1-126-948-11	ELECT	100MF	20%	35V
C552		1-126-948-11	ELECT	100MF	20%	35V
C553		1-102-127-00	CERAMIC	0.0068MF	10%	50V
C554		1-102-244-00	CERAMIC	220PF	10%	500V
C555		1-101-804-00	CERAMIC	10PF	5%	500V
C562		1-126-933-11	ELECT	100MF	20%	16V
C602		1-161-830-00	CERAMIC	0.0047MF	99%	500V
C603		1-161-830-00	CERAMIC	0.0047MF	99%	500V
C604		1-125-555-11	ELECT(BLOCK)	330MF	20%	400V
C605		1-161-830-00	CERAMIC	0.0047MF	99%	500V
C606		1-161-830-00	CERAMIC	0.0047MF	99%	500V
C607		1-161-830-00	CERAMIC	0.0047MF	99%	500V
C608		1-104-332-11	CERAMIC	470PF	10%	2KV
C609		1-124-347-00	ELECT	100MF	20%	160V
C610		1-126-943-11	ELECT	2200MF	20%	25V
C611	⚠	1-164-497-51	CERAMIC	470PF	10%	400V
C612		1-102-228-00	CERAMIC	470PF	10%	500V
C613		1-102-824-00	CERAMIC	470PF	5%	50V
C614		1-126-943-11	ELECT	2200MF	20%	25V
C616		1-102-228-00	CERAMIC	470PF	10%	500V
C618		1-102-114-00	CERAMIC	470PF	10%	50V
C619		1-162-116-00	CERAMIC	680PF	10%	2KV
C621	⚠	1-104-705-51	FILM	0.1MF	20%	250V
C622		1-107-368-11	MYLAR	0.047MF	99%	200V
C623		1-126-934-11	ELECT	220MF	20%	16V
C624		1-126-767-11	ELECT	1000MF	20%	16V
C625		1-102-074-00	CERAMIC	0.001MF	10%	50V
C627		1-162-116-00	CERAMIC	680PF	10%	2KV
C628		1-102-824-00	CERAMIC	470PF	5%	50V
C630	⚠	1-164-497-51	CERAMIC	470PF	10%	400V
C631		1-161-830-00	CERAMIC	0.0047MF	99%	500V
C632	⚠	1-164-497-51	CERAMIC	470PF	10%	400V
C633		1-161-754-00	CERAMIC	0.001MF	10%	3KV
C634		1-102-114-00	CERAMIC	470PF	10%	50V
C801		1-123-024-21	ELECT	33MF		160V
C802		1-107-364-11	MYLAR	0.01MF	10%	200V
C804		1-102-074-00	CERAMIC	0.001MF	10%	50V
C805		1-102-244-00	CERAMIC	220PF	10%	500V
C806		1-126-960-11	ELECT	1MF	20%	50V
C807		1-136-569-11	FILM	1.2MF	5%	200V
C808		1-129-746-00	FILM	0.039MF	5%	400V
C809		1-162-115-00	CERAMIC	330PF	10%	2KV
C810		1-106-365-00	MYLAR	0.0082MF	99%	200V
C811		1-162-318-11	CERAMIC	0.001MF	10%	500V
C812		1-136-081-00	FILM	0.012MF	3%	2KV
C816		1-107-636-11	ELECT	10MF	20%	160V
C820		1-161-754-00	CERAMIC	0.001MF	10%	2KV
C821		1-104-999-11	MYLAR	0.1MF	10%	200V
C822		1-136-111-00	FILM	1MF	5%	200V
C823		1-136-153-00	FILM	0.01MF	5%	50V
C825		1-107-364-11	MYLAR	0.01MF	10%	200V
C850		1-126-941-11	ELECT	470MF	20%	25V
C852		1-104-574-11	CERAMIC	0.0047MF	10%	2KV
C853		1-162-318-11	CERAMIC	0.001MF	10%	500V
C854		1-126-941-11	ELECT	470MF	20%	25V
C856		1-162-318-11	CERAMIC	0.001MF	10%	500V
C857		1-136-159-00	FILM	0.033MF	5%	50V
C860		1-102-228-00	CERAMIC	470PF	10%	500V
C861		1-107-654-11	ELECT	33MF	20%	250V
C875		1-128-562-11	ELECT	47MF	20%	100V
C876		1-107-369-11	MYLAR	0.068MF	10%	100V
C891		1-102-116-00	CERAMIC	680PF	10%	50V
C898		1-137-150-11	MYLAR	0.01MF	10%	100V
C901		1-102-824-00	CERAMIC	470PF	5%	50V
C902		1-102-824-00	CERAMIC	470PF	5%	50V
C1201		1-126-933-11	ELECT	100MF	20%	16V
C1202		1-136-165-00	FILM	0.1MF	5%	50V
C1203		1-136-165-00	FILM	0.1MF	5%	50V
C1204		1-126-933-11	ELECT	100MF	20%	16V
C1205		1-136-165-00	FILM	0.1MF	5%	50V
C1206		1-136-165-00	FILM	0.1MF	5%	50V
C1210		1-126-933-11	ELECT	100MF	20%	16V
C1213		1-126-960-11	ELECT	1MF	20%	50V
C1214		1-126-964-51	ELECT	10MF	20%	50V
C1215		1-102-976-00	CERAMIC	180PF	5%	50V
C1216		1-136-173-00	FILM	0.47MF	5%	50V
C1217		1-126-933-11	ELECT	100MF	20%	16V
C1218		1-102-976-00	CERAMIC	180PF	5%	50V
C1221		1-136-173-00	FILM	0.47MF	5%	50V
C1226		1-126-934-11	ELECT	220MF	20%	16V
C1230		1-136-165-00	FILM	0.1MF	5%	50V
C1259		1-102-127-00	CERAMIC	0.0068MF	10%	50V
C1260		1-102-127-00	CERAMIC	0.0068MF	10%	50V
C1513		1-126-968-11	ELECT	100MF	20%	50V

<FILTER>

CF55		1-567-099-00	FILTER, CERAMIC

<CONNECTOR>

CN101	*	1-560-124-00	PLUG, CONNECTOR (2.5MM) 4P
CN103	*	1-564-509-11	PLUG, CONNECTOR 6P
CN111	*	1-564-505-11	PLUG, CONNECTOR 2P
CN251	*	1-564-507-11	PLUG, CONNECTOR 4P
CN601	*	1-580-843-11	PIN, CONNECTOR (POWER)
CN602	*	1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P
CN603	*	1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P
CN604		1-695-915-11	TAB (CONTACT)
CN605		1-695-915-11	TAB (CONTACT)
CN606		1-695-915-11	TAB (CONTACT)
CN607		1-695-915-11	TAB (CONTACT)
CN609	*	1-564-506-11	PLUG, CONNECTOR 3P
CN612		1-695-915-11	TAB (CONTACT)

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

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REF. NO.	PART NO.	DESCRIPTION	REMARK
CN613	1-695-915-11	TAB (CONTACT)	
CN614	1-695-915-11	TAB (CONTACT)	
CN615	1-695-915-11	TAB (CONTACT)	
CN851	1-508-766-00	PIN, CONNECTOR (5MM PITCH) 4P	
		<COMPOSITION CIRCUIT BLOCK>	
CP001	1-233-747-11	CIRCUIT BLOCK, COMPOSITION	
CP002	1-233-749-11	CIRCUIT BLOCK, COMPOSITION	
CP003	1-233-748-11	CIRCUIT BLOCK, COMPOSITION	
CP004	1-233-750-11	CIRCUIT BLOCK, COMPOSITION	
CP005	1-233-749-11	CIRCUIT BLOCK, COMPOSITION	
		<TRIMMER>	
CT55	1-404-801-11	TRAP, CERAMIC	
		<DIODE>	
D001	8-719-109-81	DIODE RD4.7ESB2	
D002	8-719-911-19	DIODE 1SS119-25	
D003	8-719-911-19	DIODE 1SS119-25	
D005	8-719-109-84	DIODE RD5.1ESB1	
D008	8-719-109-89	DIODE RD5.6ESB2	
D103	8-719-016-42	DIODE MC932	
D251	8-719-911-19	DIODE 1SS119-25	
D252	8-719-016-42	DIODE MC932	
D301	8-719-911-19	DIODE 1SS119-25	
D305	8-719-911-19	DIODE 1SS119-25	
D306	8-719-911-19	DIODE 1SS119-25	
D307	8-719-911-19	DIODE 1SS119-25	
D308	8-719-109-54	DIODE RD2.2ESB2	
D310	8-719-911-19	DIODE 1SS119-25	
D311	8-719-109-54	DIODE RD2.2ESB2	
D312	8-719-110-08	DIODE RD8.2ESB2	
D315	8-719-121-24	DIODE RD9.1ESL	
D351	8-719-908-03	DIODE GP08D	
D399	8-719-121-24	DIODE RD9.1ESL	
D401	8-719-911-19	DIODE 1SS119-25	
D402	8-719-911-19	DIODE 1SS119-25	
D403	8-719-911-19	DIODE 1SS119-25	
D513	8-719-109-84	DIODE RD5.1ESB1	
D551	8-719-908-03	DIODE GP08D	
D561	8-719-911-19	DIODE 1SS119-25	
D591	8-719-911-19	DIODE 1SS119-25	
D601	8-719-510-53	DIODE D4SB60L	
D604	8-719-301-64	DIODE RU4DS	
D605	8-719-067-18	DIODE RN4Z	
D606	8-719-510-73	DIODE S3L20UF4	
D607	8-719-510-26	DIODE D1NL20-TA	
D609	8-719-510-26	DIODE D1NL20-TA	
D610	8-719-510-26	DIODE D1NL20-TA	
D611	8-719-510-26	DIODE D1NL20-TA	
D801	8-719-945-80	DIODE ERC06-15S	
D802	8-719-900-26	DIODE ERD29-08J	
D851	8-719-302-43	DIODE EL1Z	
D852	8-719-028-72	DIODE RGP02-17EL-6433	
D853	8-719-302-43	DIODE EL1Z	
D855	8-719-302-43	DIODE EL1Z	
D857	8-719-908-03	DIODE GP08D	
D858	8-719-908-03	DIODE GP08D	
D860	8-719-911-19	DIODE 1SS119-25	
D901	8-719-054-60	DIODE LNK0220022G	
D1201	8-719-121-24	DIODE RD9.1ESL	
D1202	8-719-121-24	DIODE RD9.1ESL	
D1203	8-719-121-24	DIODE RD9.1ESL	
D1207	8-719-121-24	DIODE RD9.1ESL	
D1208	8-719-121-24	DIODE RD9.1ESL	
D1504	8-719-911-19	DIODE 1SS119-25	
D1505	8-719-109-81	DIODE RD4.7ESB2	
		<FUSE>	
F601	⚠ 1-532-237-11	FUSE, TIME-LAG (BET) 3.15A/250V	
		<FERRITE BEAD>	
FB101	1-410-397-21	FERRITE 1.1UH	
FB102	1-410-397-21	FERRITE 1.1UH	
FB251	1-410-397-21	FERRITE 1.1UH	
FB601	1-410-397-21	FERRITE 1.1UH	
FB603	1-410-397-21	FERRITE 1.1UH	
FB610	1-410-396-41	FERRITE 0.45UH	
FB612	1-410-397-21	FERRITE 1.1UH	
FB801	1-410-397-21	FERRITE 1.1UH	
		<FUSE CLIP>	
FH01	1-533-223-11	CLIP, FUSE	
FH02	1-533-223-11	CLIP, FUSE	
		<IC>	
IC001	8-752-889-58	IC CXP85220A-055S	
IC002	8-759-805-37	IC L78LR05D-MA	
IC003	8-759-370-33	IC ST24C04FB6	
IC004	8-742-041-12	HYB IC SBX1981-11(12)	
IC102	8-759-157-40	IC UPC574J	
IC203	8-759-339-60	IC TA8248K	
IC300	8-759-365-26	IC TDA8375A	
IC351	8-759-288-85	IC TDA4665T-T	
IC354	8-759-251-56	IC TDA8395T	
IC401	8-759-800-65	IC LA7910	
IC521	8-759-195-63	IC PQ09RE11	
IC551	8-759-801-98	IC LA7830	
IC601	8-749-014-00	IC STR-S6707N	
IC602	8-749-921-89	IC SE115N	
IC603	⚠ 8-749-010-64	PHOTO COUPLER PC123F2	
IC801	8-759-145-58	IC UPC4558C	
IC1210	8-759-145-58	IC UPC4558C	

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REF. NO.	PART NO.	DESCRIPTION		REMARK
		<JACK>		
J251	1-770-786-11	JACK		
J1201	1-770-661-11	JACK BLOCK, PIN 6P		
J1202	1-695-585-11	JACK BLOCK, PIN (L TYPE) 3P		
		<COIL>		
L001	1-408-397-00	INDUCTOR	1UH	
L002	1-410-509-51	INDUCTOR	10UH	
L003	1-408-605-31	INDUCTOR	15UH	
L101	1-410-470-11	INDUCTOR	10UH	
L301	1-408-598-31	INDUCTOR	3.9UH	
L401	1-410-498-11	INDUCTOR	1.2UH	
L402	1-410-510-11	INDUCTOR	12UH	
L406	1-410-507-11	INDUCTOR	6.8UH	
L410	1-410-501-51	INDUCTOR	2.2UH	
L802	1-412-527-11	INDUCTOR	15UH	
L804	1-459-075-00	INDUCTOR	0UH	
L805	1-459-769-13	COIL, HORIZONTAL LINEARITY		
L807	1-459-390-00	INDUCTOR	0UH	
L808	1-412-553-11	INDUCTOR	3.3MMH	
L821	1-459-111-00	INDUCTOR	0UH	
L850	1-408-947-00	INDUCTOR	2.2MMH	
		<TRANSISTOR>		
Q030	8-729-119-79	TRANSISTOR 2SC2785-FEK		
Q108	8-729-119-79	TRANSISTOR 2SC2785-FEK		
Q109	8-729-119-79	TRANSISTOR 2SC2785-FEK		
Q110	8-729-119-79	TRANSISTOR 2SC2785-FEK		
Q202	8-729-119-76	TRANSISTOR 2SA1175-HFE		
Q207	8-729-119-76	TRANSISTOR 2SA1175-HFE		
Q208	8-729-030-02	TRANSISTOR DTC144ESA		
Q209	8-729-029-92	TRANSISTOR DTC143ESA		
Q210	8-729-029-92	TRANSISTOR DTC143ESA		
Q301	8-729-029-66	TRANSISTOR DTC114ESA		
Q302	8-729-119-79	TRANSISTOR 2SC2785-FEK		
Q303	8-729-119-79	TRANSISTOR 2SC2785-FEK		
Q402	8-729-922-66	TRANSISTOR 2SC2410SN		
Q403	8-729-029-92	TRANSISTOR DTC143ESA		
Q404	8-729-029-92	TRANSISTOR DTC143ESA		
Q406	8-729-119-76	TRANSISTOR 2SA1175-HFE		
Q408	8-729-119-79	TRANSISTOR 2SC2785-FEK		
Q409	8-729-119-76	TRANSISTOR 2SA1175-HFE		
Q414	8-729-119-79	TRANSISTOR 2SC2785-FEK		
Q417	8-729-029-92	TRANSISTOR DTC143ESA		
Q561	8-729-200-17	TRANSISTOR 2SA1091-R		
Q801	8-729-140-50	TRANSISTOR 2SC3209LK		
Q802	8-729-821-87	TRANSISTOR 2SD1878-CA		
Q821	8-729-209-15	TRANSISTOR 2SD2012		
Q902	8-729-030-02	TRANSISTOR DTC144ESA		
Q903	8-729-030-02	TRANSISTOR DTC144ESA		
Q1201	8-729-119-79	TRANSISTOR 2SC2785-FEK		
Q1202	8-729-119-79	TRANSISTOR 2SC2785-FEK		
Q1203	8-729-119-79	TRANSISTOR 2SC2785-FEK		
Q1204	8-729-119-76	TRANSISTOR 2SA1175-HFE		
Q1207	8-729-119-79	TRANSISTOR 2SC2785-FEK		
Q1208	8-729-119-79	TRANSISTOR 2SC2785-FEK		
Q1209	8-729-119-79	TRANSISTOR 2SC2785-FEK		
Q1513	8-729-119-79	TRANSISTOR 2SC2785-FEK		

REF. NO.	PART NO.	DESCRIPTION			REMARK
		<RESISTOR>			
R007	1-247-855-31	CARBON	10K	5%	1/4W
R008	1-249-417-11	CARBON	1K	5%	1/4W
R009	1-249-417-11	CARBON	1K	5%	1/4W
R010	1-249-417-11	CARBON	1K	5%	1/4W
R012	1-249-401-11	CARBON	47	5%	1/4W
R013	1-249-417-11	CARBON	1K	5%	1/4W
R014	1-249-417-11	CARBON	1K	5%	1/4W
R015	1-247-825-31	CARBON	560	5%	1/4W
R016	1-249-417-11	CARBON	1K	5%	1/4W
R017	1-247-839-31	CARBON	2.2K	5%	1/4W
R018	1-249-409-11	CARBON	220	5%	1/4W
R019	1-247-883-00	CARBON	150K	5%	1/4W
R021	1-247-847-31	CARBON	4.7K	5%	1/4W
R025	1-247-839-31	CARBON	2.2K	5%	1/4W
R026	1-247-839-31	CARBON	2.2K	5%	1/4W
R027	1-247-847-31	CARBON	4.7K	5%	1/4W
R028	1-247-807-31	CARBON	100	5%	1/4W
R029	1-247-847-31	CARBON	4.7K	5%	1/4W
R031	1-249-417-11	CARBON	1K	5%	1/4W
R033	1-249-417-11	CARBON	1K	5%	1/4W
R035	1-249-417-11	CARBON	1K	5%	1/4W
R036	1-249-417-11	CARBON	1K	5%	1/4W
R037	1-249-417-11	CARBON	1K	5%	1/4W
R038	1-249-409-11	CARBON	220	5%	1/4W
R040	1-249-409-11	CARBON	220	5%	1/4W
R041	1-247-807-31	CARBON	100	5%	1/4W
R042	1-249-412-11	CARBON	390	5%	1/4W
R045	1-247-839-31	CARBON	2.2K	5%	1/4W
R047	1-247-807-31	CARBON	100	5%	1/4W
R048	1-247-807-31	CARBON	100	5%	1/4W
R053	1-247-839-31	CARBON	2.2K	5%	1/4W
R054	1-247-855-31	CARBON	10K	5%	1/4W
R057	1-249-417-11	CARBON	1K	5%	1/4W
R058	1-247-847-31	CARBON	4.7K	5%	1/4W
R060	1-249-411-11	CARBON	330	5%	1/4W
R061	1-247-839-31	CARBON	2.2K	5%	1/4W
R062	1-247-839-31	CARBON	2.2K	5%	1/4W
R063	1-247-839-31	CARBON	2.2K	5%	1/4W
R065	1-249-409-11	CARBON	220	5%	1/4W
R066	1-249-409-11	CARBON	220	5%	1/4W
R068	1-247-807-31	CARBON	100	5%	1/4W
R071	1-249-411-11	CARBON	330	5%	1/4W
R076	1-247-807-31	CARBON	100	5%	1/4W
R077	1-247-807-31	CARBON	100	5%	1/4W
R090	1-247-855-31	CARBON	10K	5%	1/4W
R101	1-247-847-31	CARBON	4.7K	5%	1/4W
R102	1-249-417-11	CARBON	1K	5%	1/4W
R113	1-249-433-11	CARBON	22K	5%	1/4W
R114	1-247-823-31	CARBON	470	5%	1/4W
R115	1-249-433-11	CARBON	22K	5%	1/4W

A (KV-J21MF3)

REF. NO.	PART NO.	DESCRIPTION			REMARK
R116	1-249-433-11	CARBON	22K	5%	1/4W
R117	1-249-433-11	CARBON	22K	5%	1/4W
R118	1-249-433-11	CARBON	22K	5%	1/4W
R119	1-249-420-11	CARBON	1.8K	5%	1/4W
R120	1-247-891-00	CARBON	330K	5%	1/4W
R131	1-216-464-11	METAL OXIDE	18K	5%	2W F
R180	1-249-409-11	CARBON	220	5%	1/4W
R181	1-249-409-11	CARBON	220	5%	1/4W
R182	1-249-409-11	CARBON	220	5%	1/4W
R240	1-249-410-11	CARBON	270	5%	1/4W
R242	1-249-410-11	CARBON	270	5%	1/4W
R243	1-247-855-31	CARBON	10K	5%	1/4W
R244	1-247-855-31	CARBON	10K	5%	1/4W
R245	1-249-426-11	CARBON	5.6K	5%	1/4W
R246	1-249-426-11	CARBON	5.6K	5%	1/4W
R247	1-249-419-11	CARBON	1.5K	5%	1/4W
R248	1-249-419-11	CARBON	1.5K	5%	1/4W
R249	1-249-417-11	CARBON	1K	5%	1/4W
R250	1-249-417-11	CARBON	1K	5%	1/4W
R252	1-249-411-11	CARBON	330	5%	1/4W
R253	1-247-855-31	CARBON	10K	5%	1/4W
R254	1-249-389-11	CARBON	4.7	5%	1/4W
R255	1-249-389-11	CARBON	4.7	5%	1/4W
R256	1-249-411-11	CARBON	330	5%	1/4W
R264	1-249-431-11	CARBON	15K	5%	1/4W
R265	1-249-431-11	CARBON	15K	5%	1/4W
R266	1-249-437-11	CARBON	47K	5%	1/4W
R303	1-247-807-31	CARBON	100	5%	1/4W
R304	1-247-807-31	CARBON	100	5%	1/4W
R305	1-247-807-31	CARBON	100	5%	1/4W
R306	1-247-807-31	CARBON	100	5%	1/4W
R307	1-247-807-31	CARBON	100	5%	1/4W
R308	1-249-409-11	CARBON	220	5%	1/4W
R309	1-249-409-11	CARBON	220	5%	1/4W
R310	1-249-441-11	CARBON	100K	5%	1/4W
R311	1-249-430-11	CARBON	12K	5%	1/4W
R312	1-247-807-31	CARBON	100	5%	1/4W
R313	1-247-843-11	CARBON	3.3K	5%	1/4W
R316	1-247-847-31	CARBON	4.7K	5%	1/4W
R317	1-249-417-11	CARBON	1K	5%	1/4W
R318	1-247-881-00	CARBON	120K	5%	1/4W
R319	1-259-877-11	CARBON	1.2M	5%	1/4W
R320	1-249-434-11	CARBON	27K	5%	1/4W
R321	1-215-459-00	METAL	39K	1%	1/4W
R322	1-249-434-11	CARBON	27K	5%	1/4W
R326	1-249-412-11	CARBON	390	5%	1/4W
R330	1-247-825-31	CARBON	560	5%	1/4W
R331	1-247-897-11	CARBON	560K	5%	1/4W
R332	1-249-409-11	CARBON	220	5%	1/4W
R334	1-247-823-31	CARBON	470	5%	1/4W
R335	1-247-855-31	CARBON	10K	5%	1/4W
R336	1-247-839-31	CARBON	2.2K	5%	1/4W
R339	1-215-408-00	METAL	300	1%	1/4W
R340	1-249-410-11	CARBON	270	5%	1/4W
R341	1-249-417-11	CARBON	1K	5%	1/4W
R344	1-259-880-11	CARBON	2.2M	5%	1/4W
R351	1-249-393-11	CARBON	10	5%	1/4W

REF. NO.	PART NO.	DESCRIPTION			REMARK
R355	1-249-393-11	CARBON	10	5%	1/4W
R356	1-249-417-11	CARBON	1K	5%	1/4W
R360	1-259-884-11	CARBON	4.7M	5%	1/4W
R403	1-249-403-11	CARBON	68	5%	1/4W
R406	1-247-847-31	CARBON	4.7K	5%	1/4W
R407	1-249-424-11	CARBON	3.9K	5%	1/4W
R408	1-249-420-11	CARBON	1.8K	5%	1/4W
R409	1-247-807-31	CARBON	100	5%	1/4W
R410	1-247-855-31	CARBON	10K	5%	1/4W
R411	1-247-839-31	CARBON	2.2K	5%	1/4W
R412	1-249-427-11	CARBON	6.8K	5%	1/4W
R413	1-247-839-31	CARBON	2.2K	5%	1/4W
R414	1-247-823-31	CARBON	470	5%	1/4W
R416	1-249-409-11	CARBON	220	5%	1/4W
R419	1-249-417-11	CARBON	1K	5%	1/4W
R420	1-249-412-11	CARBON	390	5%	1/4W
R421	1-249-409-11	CARBON	220	5%	1/4W
R424	1-247-839-31	CARBON	2.2K	5%	1/4W
R425	1-249-412-11	CARBON	390	5%	1/4W
R426	1-249-407-11	CARBON	150	5%	1/4W
R429	1-249-412-11	CARBON	390	5%	1/4W
R433	1-249-433-11	CARBON	22K	5%	1/4W
R434	1-247-823-31	CARBON	470	5%	1/4W
R440	1-249-407-11	CARBON	150	5%	1/4W
R521	1-249-417-11	CARBON	1K	5%	1/4W
R552	1-247-883-00	CARBON	150K	5%	1/4W
R553	1-249-433-11	CARBON	22K	5%	1/4W
R554	1-102-074-00	CERAMIC	0.001MF	10%	50V
R555	1-247-855-31	CARBON	10K	5%	1/4W
R556	1-249-417-11	CARBON	1K	5%	1/4W
R557	1-249-420-11	CARBON	1.8K	5%	1/4W
R561	1-247-839-31	CARBON	2.2K	5%	1/4W
R562	1-249-419-11	CARBON	1.5K	5%	1/4W F
R563	1-260-126-11	CARBON	180K	5%	1/2W
R564	1-249-438-11	CARBON	56K	5%	1/4W
R565	1-249-438-11	CARBON	56K	5%	1/4W
R566	1-247-847-31	CARBON	4.7K	5%	1/4W
R569	1-260-354-71	CARBON	150K	5%	1/2W
R571	1-249-409-11	CARBON	220	5%	1/4W
R601	1-202-968-11	CEMENTED	1.2	5%	10W
R602	1-202-968-11	CEMENTED	1.2	5%	10W
R606	1-215-915-11	METAL OXIDE	470	5%	3W F
R610	1-215-924-00	METAL OXIDE	15K	5%	3W F
R611	1-202-933-61	FUSIBLE	0.1	10%	1/2W F
R612	1-249-377-11	CARBON	0.47	5%	1/4W F
R613	1-249-377-11	CARBON	0.47	5%	1/4W F
R614	1-215-877-11	METAL OXIDE	22K	5%	1W F
R615	1-249-401-11	CARBON	47	5%	1/4W
R616	1-247-289-00	CARBON	8.2M	5%	1W
R617	1-215-924-00	METAL OXIDE	15K	5%	3W F
R618	1-249-377-11	CARBON	0.47	5%	1/4W F
R619	1-249-377-11	CARBON	0.47	5%	1/4W F
R622	1-217-192-21	METAL	0.22	10%	2W
R623	1-247-807-31	CARBON	100	5%	1/4W
R624	1-216-446-00	METAL OXIDE	18	5%	2W F
R625	1-249-424-11	CARBON	3.9K	5%	1/4W
R626	1-249-420-11	CARBON	1.8K	5%	1/4W
R627	1-249-417-11	CARBON	1K	5%	1/4W

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Replace only with part number specified.

A (KV-J21MF3)

REF. NO.	PART NO.	DESCRIPTION			REMARK
R628	1-249-417-11	CARBON	1K	5% 1/4W	
R629	1-249-399-11	CARBON	33	5% 1/4W	
R632	1-249-381-11	CARBON	1	5% 1/4W	
R636	1-215-924-00	METAL OXIDE	15K	5% 3W	F
R801	1-215-920-11	METAL OXIDE	3.3K	5% 3W	F
R802	1-249-385-11	CARBON	2.2	5% 1/4W	F
R803	1-247-839-31	CARBON	2.2K	5% 1/4W	
R804	1-249-417-11	CARBON	1K	5% 1/4W	
R805	1-249-433-11	CARBON	22K	5% 1/4W	
R809	1-247-756-11	CARBON	2.2K	5% 1/2W	F
R811	1-216-343-00	METAL OXIDE	0.33	5% 1W	F
R812	1-215-447-00	METAL	12K	1% 1/4W	
R816	1-249-435-11	CARBON	33K	5% 1/4W	
R820	1-249-419-11	CARBON	1.5K	5% 1/4W	
R821	1-215-911-11	METAL OXIDE	100	5% 3W	F
R822	1-216-429-00	METAL OXIDE	270	5% 1W	F
R823	1-249-931-11	CARBON	2.2K	5% 1/4W	F
R825	1-249-392-11	CARBON	8.2	5% 1/4W	F
R826	1-249-422-11	CARBON	2.7K	5% 1/4W	
R827	1-249-440-11	CARBON	82K	5% 1/4W	
R828	1-249-424-11	CARBON	3.9K	5% 1/4W	
R829	1-249-419-11	CARBON	1.5K	5% 1/4W	
R831	1-215-863-11	METAL OXIDE	100	5% 1W	F
R832	1-247-839-31	CARBON	2.2K	5% 1/4W	
R834	1-247-855-31	CARBON	10K	5% 1/4W	
R851	1-249-382-11	CARBON	1.2	5% 1/4W	F
R852	1-249-923-11	CARBON	1K	5% 1/4W	F
R853	1-249-377-11	CARBON	0.47	5% 1/4W	F
R854	1-249-377-11	CARBON	0.47	5% 1/4W	F
R855	1-202-818-00	SOLID	1K	20% 1/2W	
R856	1-247-855-31	CARBON	10K	5% 1/4W	
R857	1-249-438-11	CARBON	56K	5% 1/4W	
R858	1-216-370-11	METAL OXIDE	1.2	5% 2W	F
R860	1-247-887-00	CARBON	220K	5% 1/4W	
R881	1-247-825-31	CARBON	560	5% 1/4W	
R882	1-249-422-11	CARBON	2.7K	5% 1/4W	
R883	1-247-903-00	CARBON	1M	5% 1/4W	
R895	1-216-349-00	METAL OXIDE	1	5% 1W	F
R898	1-247-839-31	CARBON	2.2K	5% 1/4W	
R902	1-247-847-31	CARBON	4.7K	5% 1/4W	
R904	1-247-847-31	CARBON	4.7K	5% 1/4W	
R905	1-249-417-11	CARBON	1K	5% 1/4W	
R906	1-249-417-11	CARBON	1K	5% 1/4W	
R907	1-249-420-11	CARBON	1.8K	5% 1/4W	
R908	1-249-420-11	CARBON	1.8K	5% 1/4W	
R909	1-247-843-11	CARBON	3.3K	5% 1/4W	
R910	1-247-843-11	CARBON	3.3K	5% 1/4W	
R911	1-249-428-11	CARBON	8.2K	5% 1/4W	
R913	1-247-823-31	CARBON	470	5% 1/4W	
R914	1-247-823-31	CARBON	470	5% 1/4W	
R915	1-249-428-11	CARBON	8.2K	5% 1/4W	
R1201	1-249-404-00	CARBON	82	5% 1/4W	
R1202	1-249-417-11	CARBON	1K	5% 1/4W	
R1203	1-249-437-11	CARBON	47K	5% 1/4W	
R1204	1-249-437-11	CARBON	47K	5% 1/4W	
R1205	1-249-404-00	CARBON	82	5% 1/4W	
R1206	1-249-437-11	CARBON	47K	5% 1/4W	

REF. NO.	PART NO.	DESCRIPTION			REMARK
R1207	1-249-437-11	CARBON	47K	5% 1/4W	
R1211	1-249-403-11	CARBON	68	5% 1/4W	
R1212	1-249-417-11	CARBON	1K	5% 1/4W	
R1213	1-249-417-11	CARBON	1K	5% 1/4W	
R1214	1-247-895-00	CARBON	470K	5% 1/4W	
R1215	1-247-895-00	CARBON	470K	5% 1/4W	
R1216	1-247-895-00	CARBON	470K	5% 1/4W	
R1217	1-247-823-31	CARBON	470	5% 1/4W	
R1219	1-247-855-31	CARBON	10K	5% 1/4W	
R1220	1-249-417-11	CARBON	1K	5% 1/4W	
R1221	1-247-855-31	CARBON	10K	5% 1/4W	
R1226	1-249-436-11	CARBON	39K	5% 1/4W	
R1227	1-249-436-11	CARBON	39K	5% 1/4W	
R1228	1-249-417-11	CARBON	1K	5% 1/4W	
R1229	1-247-823-31	CARBON	470	5% 1/4W	
R1230	1-247-855-31	CARBON	10K	5% 1/4W	
R1231	1-249-417-11	CARBON	1K	5% 1/4W	
R1232	1-249-424-11	CARBON	3.9K	5% 1/4W	
R1233	1-247-839-31	CARBON	2.2K	5% 1/4W	
R1234	1-249-436-11	CARBON	39K	5% 1/4W	
R1235	1-249-436-11	CARBON	39K	5% 1/4W	
R1239	1-249-389-11	CARBON	4.7	5% 1/4W	F
R1240	1-247-807-31	CARBON	100	5% 1/4W	
R1241	1-249-417-11	CARBON	1K	5% 1/4W	
R1243	1-247-807-31	CARBON	100	5% 1/4W	
R1246	1-249-411-11	CARBON	330	5% 1/4W	
R1247	1-247-823-31	CARBON	470	5% 1/4W	
R1248	1-249-417-11	CARBON	1K	5% 1/4W	
R1249	1-247-823-31	CARBON	470	5% 1/4W	
R1250	1-247-901-11	CARBON	820K	5% 1/4W	
R1251	1-247-901-11	CARBON	820K	5% 1/4W	
R1252	1-247-839-31	CARBON	2.2K	5% 1/4W	
R1253	1-249-418-11	CARBON	1.2K	5% 1/4W	
R1513	1-247-855-31	CARBON	10K	5% 1/4W	
R1514	1-247-847-31	CARBON	4.7K	5% 1/4W	
R1515	1-247-807-31	CARBON	100	5% 1/4W	
		<SWITCH>			
S601	⚠ 1-571-433-31	SWITCH, PUSH (AC POWER)			
S801	1-572-707-11	SWITCH, LEVER			
S901	1-570-577-41	SWITCH, PUSH			
S902	1-570-577-41	SWITCH, PUSH			
S903	1-570-577-41	SWITCH, PUSH			
S904	1-570-577-41	SWITCH, PUSH			
S905	1-570-577-41	SWITCH, PUSH			
		<SPARK GAP>			
SG801	1-519-422-11	GAP, SPARK			
		<SURFACE WAVE FILTER>			
SWF401	1-760-771-11	FILTER, SURFACE WAVE			

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

A (KV-J21MF3) **A (KV-J21PF1)**

REF. NO.		PART NO.	DESCRIPTION			REMARK
			<TRANSFORMER>			
T601	⚠	1-429-137-21	TRANSFORMER, CONVERTER (SRT)			
T605	⚠	1-431-383-21	TRANSFORMER, LINE FILTER			
T801		1-437-195-11	TRANSFORMER, HORIZONTAL DRIVE			
T851	⚠	1-453-193-21	TRANSFORMER ASSY, FLYBACK (NX-1742//M3A)			
			<THERMISTOR>			
THP601	⚠	1-808-059-31	THERMISTOR, POSITIVE			
			<TUNER>			
TU101	⚠	8-598-323-30	TUNER, VSS BT-AG401			
			<CRYSTAL>			
X101		1-577-082-11	VIBRATOR, CERAMIC			
X300		1-411-752-11	COIL			
X358		1-567-505-11	OSCILLATOR, CRYSTAL			
X443		1-567-504-11	OSCILLATOR, CRYSTAL			
**********						
	*	A-1298-518-A	A BOARD, COMPLETE (KV-J21PF1)			
			**********			
	*	1-580-798-11	CONNECTOR PIN (DY) 6P			
	*	3-691-950-11	SPACER, P.C.BOARD			
		4-382-854-11	SCREW (M3X10), P, SW (+)			
			<CAPACITOR>			
C001		1-102-119-00	CERAMIC	0.0015MF	10%	50V
C002		1-126-965-11	ELECT	22MF	20%	50V
C004		1-125-800-51	ELECT	2.2MF	20%	63V
C007		1-125-798-51	ELECT	0.47MF	20%	63V
C009		1-102-824-00	CERAMIC	470PF	5%	50V
C010		1-136-157-00	FILM	0.022MF	5%	50V
C011		1-125-794-51	ELECT	47MF	20%	16V
C015		1-101-884-00	CERAMIC	56PF	5%	50V
C016		1-101-884-00	CERAMIC	56PF	5%	50V
C017		1-102-973-00	CERAMIC	100PF	5%	50V
C018		1-102-973-00	CERAMIC	100PF	5%	50V
C021		1-102-074-00	CERAMIC	0.001MF	10%	50V
C022		1-102-074-00	CERAMIC	0.001MF	10%	50V
C023		1-102-074-00	CERAMIC	0.001MF	10%	50V
C024		1-102-074-00	CERAMIC	0.001MF	10%	50V
C025		1-102-074-00	CERAMIC	0.001MF	10%	50V
C026		1-102-074-00	CERAMIC	0.001MF	10%	50V
C027		1-102-074-00	CERAMIC	0.001MF	10%	50V
C034		1-136-165-00	FILM	0.1MF	5%	50V
C042		1-102-973-00	CERAMIC	100PF	5%	50V
C044		1-102-973-00	CERAMIC	100PF	5%	50V
C046		1-102-973-00	CERAMIC	100PF	5%	50V
C048		1-136-165-00	FILM	0.1MF	5%	50V
C049		1-136-165-00	FILM	0.1MF	5%	50V
C050		1-126-960-11	ELECT	1MF	20%	50V
C052		1-136-165-00	FILM	0.1MF	5%	50V
C053		1-102-074-00	CERAMIC	0.001MF	10%	50V
C055		1-126-935-11	ELECT	470MF	20%	16V
C056		1-102-074-00	CERAMIC	0.001MF	10%	50V
C057		1-102-852-91	CERAMIC	47PF	5%	50V
C058		1-102-973-00	CERAMIC	100PF	5%	50V
C059		1-102-973-00	CERAMIC	100PF	5%	50V
C060		1-102-074-00	CERAMIC	0.001MF	10%	50V
C061		1-125-800-51	ELECT	2.2MF	20%	63V
C072		1-126-935-11	ELECT	470MF	20%	16V
C074		1-102-110-00	CERAMIC	220PF	10%	50V
C101		1-101-003-00	CERAMIC	0.0047MF		50V
C102		1-136-165-00	FILM	0.1MF	5%	50V
C105		1-125-806-51	ELECT	220MF	20%	16V
C106		1-125-797-51	ELECT	10MF	20%	50V
C108		1-125-807-51	ELECT	1000MF	20%	16V
C109		1-102-125-00	CERAMIC	0.0047MF	10%	50V
C111		1-102-074-00	CERAMIC	0.001MF	10%	50V
C114		1-102-973-00	CERAMIC	100PF	5%	50V
C115		1-102-947-00	CERAMIC	10PF	0.5PF	50V
C116		1-136-165-00	FILM	0.1MF	5%	50V
C117		1-102-973-00	CERAMIC	100PF	5%	50V
C118		1-126-965-11	ELECT	22MF	20%	50V
C119		1-136-153-00	FILM	0.01MF	5%	50V
C120		1-130-493-00	MYLAR	0.068MF	5%	50V
C121		1-130-493-00	MYLAR	0.068MF	5%	50V
C122		1-125-804-51	ELECT	100MF	20%	16V
C124		1-136-165-00	FILM	0.1MF	5%	50V
C125		1-136-165-00	FILM	0.1MF	5%	50V
C233		1-125-794-51	ELECT	47MF	20%	16V
C234		1-125-794-51	ELECT	47MF	20%	16V
C235		1-125-804-51	ELECT	100MF	20%	16V
C236		1-126-949-11	ELECT	220MF	20%	35V
C237		1-125-804-51	ELECT	100MF	20%	16V
C238		1-137-188-51	FILM	0.15MF	5%	50V
C239		1-125-804-51	ELECT	100MF	20%	16V
C240		1-137-188-51	FILM	0.15MF	5%	50V
C241		1-125-813-51	ELECT	1000MF	20%	25V
C242		1-136-153-00	FILM	0.01MF	5%	50V
C243		1-125-797-51	ELECT	10MF	20%	50V
C244		1-125-813-51	ELECT	1000MF	20%	25V
C246		1-128-551-11	ELECT	22MF	20%	25V
C247		1-125-813-51	ELECT	1000MF	20%	25V
C253		1-125-804-51	ELECT	100MF	20%	16V
C254		1-136-153-00	FILM	0.01MF	5%	50V
C255		1-136-153-00	FILM	0.01MF	5%	50V
C257		1-136-165-00	FILM	0.1MF	5%	50V
C258		1-136-165-00	FILM	0.1MF	5%	50V
C300		1-125-794-51	ELECT	47MF	20%	16V
C304		1-136-165-00	FILM	0.1MF	5%	50V
C305		1-136-165-00	FILM	0.1MF	5%	50V
C306		1-136-165-00	FILM	0.1MF	5%	50V
C307		1-136-165-00	FILM	0.1MF	5%	50V
C308		1-136-165-00	FILM	0.1MF	5%	50V
C309		1-136-165-00	FILM	0.1MF	5%	50V
C310		1-136-165-00	FILM	0.1MF	5%	50V
C311		1-102-951-00	CERAMIC	15PF	5%	50V
C312		1-102-951-00	CERAMIC	15PF	5%	50V

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REF. NO.	PART NO.	DESCRIPTION			REMARK
C313	1-125-804-51	ELECT	100MF	20%	16V
C314	1-102-121-00	CERAMIC	0.0022MF	10%	50V
C315	1-126-960-11	ELECT	1MF	20%	50V
C316	1-102-125-00	CERAMIC	0.0047MF	10%	50V
C319	1-136-165-00	FILM	0.1MF	5%	50V
C320	1-136-165-00	FILM	0.1MF	5%	50V
C321	1-136-165-00	FILM	0.1MF	5%	50V
C323	1-101-880-00	CERAMIC	47PF	5%	50V
C324	1-125-800-51	ELECT	2.2MF	20%	63V
C325	1-102-947-00	CERAMIC	10PF	0.5PF	50V
C326	1-102-949-00	CERAMIC	12PF	5%	50V
C327	1-102-947-00	CERAMIC	10PF	0.5PF	50V
C328	1-136-153-00	FILM	0.01MF	5%	50V
C329	1-130-478-00	MYLAR	0.0039MF	5%	50V
C330	1-136-165-00	FILM	0.1MF	5%	50V
C331	1-125-797-51	ELECT	10MF	20%	50V
C332	1-136-165-00	FILM	0.1MF	5%	50V
C333	1-136-165-00	FILM	0.1MF	5%	50V
C334	1-102-123-00	CERAMIC	0.0033MF	10%	50V
C335	1-102-973-00	CERAMIC	100PF	5%	50V
C336	1-125-797-51	ELECT	10MF	20%	50V
C337	1-125-804-51	ELECT	100MF	20%	16V
C339	1-101-361-00	CERAMIC	150PF	5%	50V
C340	1-102-074-00	CERAMIC	0.001MF	10%	50V
C341	1-102-973-00	CERAMIC	100PF	5%	50V
C342	1-136-165-00	FILM	0.1MF	5%	50V
C344	1-125-797-51	ELECT	10MF	20%	50V
C349	1-125-797-51	ELECT	10MF	20%	50V
C359	1-125-804-51	ELECT	100MF	20%	16V
C361	1-102-074-00	CERAMIC	0.001MF	10%	50V
C362	1-162-211-31	CERAMIC	33PF	5%	50V
C367	1-136-165-00	FILM	0.1MF	5%	50V
C368	1-136-165-00	FILM	0.1MF	5%	50V
C369	1-136-165-00	FILM	0.1MF	5%	50V
C370	1-136-165-00	FILM	0.1MF	5%	50V
C374	1-126-967-11	ELECT	47MF	20%	50V
C375	1-126-967-11	ELECT	47MF	20%	50V
C402	1-136-153-00	FILM	0.01MF	5%	50V
C403	1-126-968-11	ELECT	100MF	20%	50V
C405	1-102-125-00	CERAMIC	0.0047MF	10%	50V
C406	1-102-125-00	CERAMIC	0.0047MF	10%	50V
C407	1-102-125-00	CERAMIC	0.0047MF	10%	50V
C408	1-102-125-00	CERAMIC	0.0047MF	10%	50V
C410	1-102-961-00	CERAMIC	27PF	5%	50V
C411	1-101-888-00	CERAMIC	68PF	5%	50V
C423	1-102-820-00	CERAMIC	330PF	5%	50V
C501	1-102-228-00	CERAMIC	470PF	10%	500V
C523	1-126-933-11	ELECT	100MF	20%	16V
C548	1-106-220-00	MYLAR	0.1MF	10%	100V
C551	1-126-948-11	ELECT	100MF	20%	35V
C552	1-126-948-11	ELECT	100MF	20%	35V
C553	1-102-127-00	CERAMIC	0.0068MF	10%	50V
C554	1-102-244-00	CERAMIC	220PF	10%	500V
C555	1-101-804-00	CERAMIC	10PF	5%	500V
C562	1-126-933-11	ELECT	100MF	20%	16V
C602	1-161-830-00	CERAMIC	0.0047MF	99%	500V
C603	1-161-830-00	CERAMIC	0.0047MF	99%	500V
C604	1-117-752-11	ELECT(BLOCK)	330MF	20%	450V

REF. NO.		PART NO.	DESCRIPTION			REMARK
C605		1-161-830-00	CERAMIC	0.0047MF	99%	500V
C606		1-161-830-00	CERAMIC	0.0047MF	99%	500V
C607		1-161-830-00	CERAMIC	0.0047MF	99%	500V
C608		1-104-332-11	CERAMIC	470PF	10%	2KV
C609		1-124-347-00	ELECT	100MF	20%	160V
C610		1-126-943-11	ELECT	2200MF	20%	25V
C611	⚠	1-164-497-51	CERAMIC	470PF	10%	400V
C612		1-102-228-00	CERAMIC	470PF	10%	500V
C613		1-102-824-00	CERAMIC	470PF	5%	50V
C614		1-126-943-11	ELECT	2200MF	20%	25V
C616		1-102-228-00	CERAMIC	470PF	10%	500V
C618		1-102-114-00	CERAMIC	470PF	10%	50V
C619		1-162-116-00	CERAMIC	680PF	10%	2KV
C621	⚠	1-104-705-51	FILM	0.1MF	20%	250V
C622		1-107-368-11	MYLAR	0.047MF	99%	200V
C623		1-126-934-11	ELECT	220MF	20%	16V
C624		1-126-767-11	ELECT	1000MF	20%	16V
C625		1-102-074-00	CERAMIC	0.001MF	10%	50V
C627		1-162-116-00	CERAMIC	680PF	10%	2KV
C628		1-102-824-00	CERAMIC	470PF	5%	50V
C630	⚠	1-164-497-51	CERAMIC	470PF	10%	400V
C631		1-161-830-00	CERAMIC	0.0047MF	99%	500V
C632	⚠	1-164-497-51	CERAMIC	470PF	10%	400V
C633		1-161-754-00	CERAMIC	0.001MF	10%	3KV
C634		1-102-114-00	CERAMIC	470PF	10%	50V
C801		1-123-024-21	ELECT	33MF		160V
C802		1-107-364-11	MYLAR	0.01MF	10%	200V
C804		1-102-074-00	CERAMIC	0.001MF	10%	50V
C805		1-102-244-00	CERAMIC	220PF	10%	500V
C806		1-126-960-11	ELECT	1MF	20%	50V
C807		1-136-569-11	FILM	1.2MF	5%	200V
C808		1-129-746-00	FILM	0.039MF	5%	400V
C809		1-162-115-00	CERAMIC	330PF	10%	2KV
C810		1-106-365-00	MYLAR	0.0082MF	99%	200V
C811		1-162-318-11	CERAMIC	0.001MF	10%	500V
C812		1-136-081-00	FILM	0.012MF	3%	2KV
C816		1-107-636-11	ELECT	10MF	20%	160V
C820		1-161-754-00	CERAMIC	0.001MF	10%	2KV
C821		1-104-999-11	MYLAR	0.1MF	10%	200V
C822		1-136-111-00	FILM	1MF	5%	200V
C823		1-136-153-00	FILM	0.01MF	5%	50V
C825		1-107-364-11	MYLAR	0.01MF	10%	200V
C850		1-126-941-11	ELECT	470MF	20%	25V
C852		1-104-574-11	CERAMIC	0.0047MF	10%	2KV
C853		1-162-318-11	CERAMIC	0.001MF	10%	500V
C854		1-126-941-11	ELECT	470MF	20%	25V
C856		1-162-318-11	CERAMIC	0.001MF	10%	500V
C857		1-136-159-00	FILM	0.033MF	5%	50V
C860		1-102-228-00	CERAMIC	470PF	10%	500V
C861		1-107-654-11	ELECT	33MF	20%	250V
C875		1-128-562-11	ELECT	47MF	20%	100V
C876		1-107-369-11	MYLAR	0.068MF	10%	100V
C891		1-102-116-00	CERAMIC	680PF	10%	50V
C898		1-137-150-11	MYLAR	0.01MF	10%	100V
C901		1-102-824-00	CERAMIC	470PF	5%	50V
C902		1-102-824-00	CERAMIC	470PF	5%	50V
C1201		1-125-804-51	ELECT	100MF	20%	16V
C1202		1-136-165-00	FILM	0.1MF	5%	50V

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A (KV-J21PF1)

REF. NO.	PART NO.	DESCRIPTION			REMARK
C1203	1-136-165-00	FILM	0.1MF	5%	50V
C1204	1-125-804-51	ELECT	100MF	20%	16V
C1205	1-136-165-00	FILM	0.1MF	5%	50V
C1206	1-136-165-00	FILM	0.1MF	5%	50V
C1210	1-125-804-51	ELECT	100MF	20%	16V
C1213	1-126-960-11	ELECT	1MF	20%	50V
C1214	1-125-797-51	ELECT	10MF	20%	50V
C1215	1-102-976-00	CERAMIC	180PF	5%	50V
C1216	1-136-173-00	FILM	0.47MF	5%	50V
C1217	1-125-804-51	ELECT	100MF	20%	16V
C1218	1-102-976-00	CERAMIC	180PF	5%	50V
C1221	1-136-173-00	FILM	0.47MF	5%	50V
C1226	1-125-806-51	ELECT	220MF	20%	16V
C1230	1-136-165-00	FILM	0.1MF	5%	50V
C1259	1-102-127-00	CERAMIC	0.0068MF	10%	50V
C1260	1-102-127-00	CERAMIC	0.0068MF	10%	50V
C1513	1-126-968-11	ELECT	100MF	20%	50V
		<FILTER>			
CF55	1-567-099-00	FILTER, CERAMIC			
		<CONNECTOR>			
CN101 *	1-560-124-00	PLUG, CONNECTOR (2.5MM) 4P			
CN103 *	1-564-509-11	PLUG, CONNECTOR 6P			
CN251 *	1-564-507-11	PLUG, CONNECTOR 4P			
CN601 *	1-580-843-11	PIN, CONNECTOR (POWER)			
CN602 *	1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P			
CN603 *	1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P			
CN604	1-695-915-11	TAB (CONTACT)			
CN605	1-695-915-11	TAB (CONTACT)			
CN606	1-695-915-11	TAB (CONTACT)			
CN607	1-695-915-11	TAB (CONTACT)			
CN612	1-695-915-11	TAB (CONTACT)			
CN613	1-695-915-11	TAB (CONTACT)			
CN614	1-695-915-11	TAB (CONTACT)			
CN615	1-695-915-11	TAB (CONTACT)			
CN851	1-508-766-00	PIN, CONNECTOR (5MM PITCH) 4P			
		<COMPOSITION CIRCUIT BLOCK>			
CP001	1-233-747-11	CIRCUIT BLOCK, COMPOSITION			
CP002	1-233-749-11	CIRCUIT BLOCK, COMPOSITION			
CP003	1-233-748-11	CIRCUIT BLOCK, COMPOSITION			
CP004	1-233-750-11	CIRCUIT BLOCK, COMPOSITION			
CP005	1-233-749-11	CIRCUIT BLOCK, COMPOSITION			
		<TRIMMER>			
CT55	1-404-801-11	TRAP, CERAMIC			
		<DIODE>			
D001	8-719-109-81	DIODE RD4.7ESB2			
D002	8-719-911-19	DIODE 1SS119-25			
D003	8-719-911-19	DIODE 1SS119-25			
D005	8-719-109-84	DIODE RD5.1ESB1			
D008	8-719-109-89	DIODE RD5.6ESB2			

REF. NO.	PART NO.	DESCRIPTION	REMARK
D103	8-719-016-42	DIODE MC932	
D251	8-719-911-19	DIODE 1SS119-25	
D252	8-719-016-42	DIODE MC932	
D301	8-719-911-19	DIODE 1SS119-25	
D305	8-719-911-19	DIODE 1SS119-25	
D306	8-719-911-19	DIODE 1SS119-25	
D307	8-719-911-19	DIODE 1SS119-25	
D308	8-719-109-54	DIODE RD2.2ESB2	
D310	8-719-911-19	DIODE 1SS119-25	
D311	8-719-109-54	DIODE RD2.2ESB2	
D312	8-719-110-08	DIODE RD8.2ESB2	
D315	8-719-121-24	DIODE RD9.1ESL	
D351	8-719-908-03	DIODE GP08D	
D399	8-719-121-24	DIODE RD9.1ESL	
D403	8-719-911-19	DIODE 1SS119-25	
D513	8-719-109-84	DIODE RD5.1ESB1	
D551	8-719-908-03	DIODE GP08D	
D561	8-719-911-19	DIODE 1SS119-25	
D591	8-719-911-19	DIODE 1SS119-25	
D601	8-719-510-53	DIODE D4SB60L	
D604	8-719-301-64	DIODE RU4DS	
D605	8-719-510-73	DIODE S3L20UF4	
D606	8-719-510-73	DIODE S3L20UF4	
D607	8-719-510-26	DIODE D1NL20-TA	
D609	8-719-510-26	DIODE D1NL20-TA	
D610	8-719-510-26	DIODE D1NL20-TA	
D611	8-719-510-26	DIODE D1NL20-TA	
D801	8-719-945-80	DIODE ERC06-15S	
D802	8-719-900-26	DIODE ERD29-08J	
D851	8-719-302-43	DIODE EL1Z	
D852	8-719-028-72	DIODE RGP02-17EL-6433	
D853	8-719-302-43	DIODE EL1Z	
D855	8-719-302-43	DIODE EL1Z	
D857	8-719-908-03	DIODE GP08D	
D858	8-719-908-03	DIODE GP08D	
D860	8-719-911-19	DIODE 1SS119-25	
D901	8-719-054-60	DIODE LNK0220022G	
D1201	8-719-121-24	DIODE RD9.1ESL	
D1202	8-719-121-24	DIODE RD9.1ESL	
D1203	8-719-121-24	DIODE RD9.1ESL	
D1207	8-719-121-24	DIODE RD9.1ESL	
D1208	8-719-121-24	DIODE RD9.1ESL	
D1504	8-719-911-19	DIODE 1SS119-25	
D1505	8-719-109-81	DIODE RD4.7ESB2	
		<FUSE>	
F601 ⚠	1-532-237-11	FUSE, TIME-LAG (BET) 3.15A/250V	
		<FERRITE BEAD>	
FB101	1-410-397-21	FERRITE 1.1UH	
FB102	1-410-397-21	FERRITE 1.1UH	
FB251	1-410-397-21	FERRITE 1.1UH	
FB601	1-410-397-21	FERRITE 1.1UH	
FB603	1-410-397-21	FERRITE 1.1UH	
FB610	1-410-396-41	FERRITE 0.45UH	
FB612	1-410-397-21	FERRITE 1.1UH	
FB801	1-410-397-21	FERRITE 1.1UH	

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REF. NO.	PART NO.	DESCRIPTION	REMARK
		<FUSE CLIP>	
FH01	1-533-223-11	CLIP, FUSE	
FH02	1-533-223-11	CLIP, FUSE	
		<IC>	
IC001	8-752-889-58	IC CXP85220A-055S	
IC002	8-759-805-37	IC L78LR05D-MA	
IC003	8-759-370-34	IC ST24C08FB6	
IC004	8-742-041-12	HYB IC SBX1981-11(12)	
IC102	8-759-157-40	IC UPC574J	
IC203	8-759-339-60	IC TA8248K	
IC300	8-759-365-26	IC TDA8375A	
IC351	8-759-288-85	IC TDA4665T-T	
IC521	8-759-195-63	IC PQ09RE11	
IC551	8-759-801-98	IC LA7830	
IC601	8-749-014-00	IC STR-S6707N	
IC602	8-749-921-89	IC SE115N	
IC603 ⚠	8-749-010-64	PHOTO COUPLER PC123F2	
IC801	8-759-145-58	IC UPC4558C	
IC1210	8-759-145-58	IC UPC4558C	
		<JACK>	
J251	1-770-786-11	JACK	
J1201	1-770-661-11	JACK BLOCK, PIN 6P	
J1202	1-695-585-11	JACK BLOCK, PIN (L TYPE) 3P	
		<COIL>	
L001	1-408-397-00	INDUCTOR 1UH	
L002	1-410-509-51	INDUCTOR 10UH	
L003	1-408-605-31	INDUCTOR 15UH	
L101	1-410-470-11	INDUCTOR 10UH	
L301	1-408-598-31	INDUCTOR 3.9UH	
L401	1-410-498-11	INDUCTOR 1.2UH	
L402	1-410-510-11	INDUCTOR 12UH	
L406	1-410-507-11	INDUCTOR 6.8UH	
L410	1-410-501-51	INDUCTOR 2.2UH	
L802	1-412-527-11	INDUCTOR 15UH	
L804	1-459-075-00	INDUCTOR 0UH	
L805	1-459-769-13	COIL, HORIZONTAL LINEARITY	
L807	1-459-390-00	INDUCTOR 0UH	
L808	1-412-553-11	INDUCTOR 3.3MMH	
L821	1-459-111-00	INDUCTOR 0UH	
L850	1-408-947-00	INDUCTOR 2.2MMH	
		<TRANSISTOR>	
Q030	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q108	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q109	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q110	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q202	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q207	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q208	8-729-030-02	TRANSISTOR DTC144ESA	
Q209	8-729-029-92	TRANSISTOR DTC143ESA	
Q210	8-729-029-92	TRANSISTOR DTC143ESA	
Q301	8-729-029-66	TRANSISTOR DTC114ESA	
Q303	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q402	8-729-922-66	TRANSISTOR 2SC2410SN	
Q406	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q408	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q409	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q414	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q561	8-729-200-17	TRANSISTOR 2SA1091-R	
Q801	8-729-140-50	TRANSISTOR 2SC3209LK	
Q802	8-729-821-87	TRANSISTOR 2SD1878-CA	
Q821	8-729-209-15	TRANSISTOR 2SD2012	
Q902	8-729-030-02	TRANSISTOR DTC144ESA	
Q903	8-729-030-02	TRANSISTOR DTC144ESA	
Q1201	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1202	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1203	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1204	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q1207	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1208	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1209	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1513	8-729-119-78	TRANSISTOR 2SC2785-HFE	
		<RESISTOR>	
R007	1-247-855-31	CARBON 10K 5% 1/4W	
R008	1-220-958-81	METAL 1K 5% 1/2W	
R010	1-220-958-81	METAL 1K 5% 1/2W	
R012	1-249-401-11	CARBON 47 5% 1/4W	
R013	1-220-958-81	METAL 1K 5% 1/2W	
R015	1-247-825-31	CARBON 560 5% 1/4W	
R016	1-220-958-81	METAL 1K 5% 1/2W	
R017	1-220-961-81	METAL 2.2K 5% 1/2W	
R018	1-249-409-11	CARBON 220 5% 1/4W	
R019	1-247-883-00	CARBON 150K 5% 1/4W	
R021	1-247-847-31	CARBON 4.7K 5% 1/4W	
R025	1-220-961-81	METAL 2.2K 5% 1/2W	
R026	1-220-961-81	METAL 2.2K 5% 1/2W	
R027	1-247-847-31	CARBON 4.7K 5% 1/4W	
R028	1-247-807-31	CARBON 100 5% 1/4W	
R029	1-247-847-31	CARBON 4.7K 5% 1/4W	
R031	1-220-958-81	METAL 1K 5% 1/2W	
R033	1-220-958-81	METAL 1K 5% 1/2W	
R035	1-220-958-81	METAL 1K 5% 1/2W	
R036	1-220-958-81	METAL 1K 5% 1/2W	
R038	1-249-409-11	CARBON 220 5% 1/4W	
R040	1-249-409-11	CARBON 220 5% 1/4W	
R041	1-247-807-31	CARBON 100 5% 1/4W	
R042	1-249-412-11	CARBON 390 5% 1/4W	
R045	1-220-961-81	METAL 2.2K 5% 1/2W	
R047	1-247-807-31	CARBON 100 5% 1/4W	
R048	1-247-807-31	CARBON 100 5% 1/4W	
R053	1-220-961-81	METAL 2.2K 5% 1/2W	
R054	1-247-855-31	CARBON 10K 5% 1/4W	
R057	1-220-958-81	METAL 1K 5% 1/2W	
R060	1-249-411-11	CARBON 330 5% 1/4W	
R061	1-220-961-81	METAL 2.2K 5% 1/2W	

A (KV-J21PF1)

REF. NO.	PART NO.	DESCRIPTION			REMARK
R062	1-220-961-81	METAL	2.2K	5%	1/2W
R063	1-220-961-81	METAL	2.2K	5%	1/2W
R065	1-249-409-11	CARBON	220	5%	1/4W
R066	1-249-409-11	CARBON	220	5%	1/4W
R068	1-247-807-31	CARBON	100	5%	1/4W
R071	1-249-411-11	CARBON	330	5%	1/4W
R076	1-247-807-31	CARBON	100	5%	1/4W
R077	1-247-807-31	CARBON	100	5%	1/4W
R090	1-247-855-31	CARBON	10K	5%	1/4W
R101	1-247-847-31	CARBON	4.7K	5%	1/4W
R102	1-220-958-81	METAL	1K	5%	1/2W
R113	1-249-433-11	CARBON	22K	5%	1/4W
R114	1-247-823-31	CARBON	470	5%	1/4W
R115	1-249-433-11	CARBON	22K	5%	1/4W
R116	1-249-433-11	CARBON	22K	5%	1/4W
R117	1-249-433-11	CARBON	22K	5%	1/4W
R118	1-249-433-11	CARBON	22K	5%	1/4W
R119	1-220-960-81	METAL	1.8K	5%	1/2W
R120	1-247-891-00	CARBON	330K	5%	1/4W
R131	1-216-464-11	METAL OXIDE	18K	5%	2W F
R180	1-249-409-11	CARBON	220	5%	1/4W
R181	1-249-409-11	CARBON	220	5%	1/4W
R182	1-249-409-11	CARBON	220	5%	1/4W
R240	1-249-410-11	CARBON	270	5%	1/4W
R242	1-249-410-11	CARBON	270	5%	1/4W
R243	1-247-855-31	CARBON	10K	5%	1/4W
R244	1-247-855-31	CARBON	10K	5%	1/4W
R245	1-249-426-11	CARBON	5.6K	5%	1/4W
R246	1-249-426-11	CARBON	5.6K	5%	1/4W
R247	1-220-959-81	METAL	1.5K	5%	1/2W
R248	1-220-959-81	METAL	1.5K	5%	1/2W
R249	1-220-958-81	METAL	1K	5%	1/2W
R250	1-220-958-81	METAL	1K	5%	1/2W
R252	1-249-411-11	CARBON	330	5%	1/4W
R253	1-247-855-31	CARBON	10K	5%	1/4W
R254	1-249-389-11	CARBON	4.7	5%	1/4W
R255	1-249-389-11	CARBON	4.7	5%	1/4W
R256	1-249-411-11	CARBON	330	5%	1/4W
R264	1-249-431-11	CARBON	15K	5%	1/4W
R265	1-249-431-11	CARBON	15K	5%	1/4W
R266	1-249-437-11	CARBON	47K	5%	1/4W
R303	1-247-807-31	CARBON	100	5%	1/4W
R304	1-247-807-31	CARBON	100	5%	1/4W
R305	1-247-807-31	CARBON	100	5%	1/4W
R306	1-247-807-31	CARBON	100	5%	1/4W
R307	1-247-807-31	CARBON	100	5%	1/4W
R308	1-249-409-11	CARBON	220	5%	1/4W
R309	1-249-409-11	CARBON	220	5%	1/4W
R310	1-249-441-11	CARBON	100K	5%	1/4W
R311	1-249-430-11	CARBON	12K	5%	1/4W
R312	1-247-807-31	CARBON	100	5%	1/4W
R313	1-220-963-81	METAL	3.3K	5%	1/2W
R318	1-220-978-81	METAL	120K	5%	1/2W
R319	1-259-877-11	CARBON	1.2M	5%	1/4W
R320	1-249-434-11	CARBON	27K	5%	1/4W
R321	1-215-459-00	METAL	39K	1%	1/4W
R322	1-249-434-11	CARBON	27K	5%	1/4W
R326	1-249-424-11	CARBON	3.9K	5%	1/4W
R330	1-247-825-31	CARBON	560	5%	1/4W
R331	1-247-897-11	CARBON	560K	5%	1/4W
R332	1-249-409-11	CARBON	220	5%	1/4W
R335	1-247-855-31	CARBON	10K	5%	1/4W
R336	1-220-961-81	METAL	2.2K	5%	1/2W
R339	1-215-408-00	METAL	300	1%	1/4W
R340	1-249-411-11	CARBON	330	5%	1/4W
R341	1-220-958-81	METAL	1K	5%	1/2W
R344	1-259-880-11	CARBON	2.2M	5%	1/4W
R351	1-249-393-11	CARBON	10	5%	1/4W
R355	1-249-393-11	CARBON	10	5%	1/4W
R356	1-220-958-81	METAL	1K	5%	1/2W
R360	1-259-884-11	CARBON	4.7M	5%	1/4W
R403	1-220-946-81	METAL	68	5%	1/2W
R406	1-247-847-31	CARBON	4.7K	5%	1/4W
R407	1-249-424-11	CARBON	3.9K	5%	1/4W
R408	1-220-960-81	METAL	1.8K	5%	1/2W
R409	1-247-807-31	CARBON	100	5%	1/4W
R414	1-247-823-31	CARBON	470	5%	1/4W
R416	1-249-409-11	CARBON	220	5%	1/4W
R419	1-220-958-81	METAL	1K	5%	1/2W
R420	1-249-412-11	CARBON	390	5%	1/4W
R421	1-249-409-11	CARBON	220	5%	1/4W
R424	1-220-961-81	METAL	2.2K	5%	1/2W
R425	1-249-412-11	CARBON	390	5%	1/4W
R426	1-249-407-11	CARBON	150	5%	1/4W
R429	1-249-412-11	CARBON	390	5%	1/4W
R433	1-249-433-11	CARBON	22K	5%	1/4W
R434	1-247-823-31	CARBON	470	5%	1/4W
R438	1-247-823-31	CARBON	470	5%	1/4W
R440	1-249-407-11	CARBON	150	5%	1/4W
R521	1-249-417-11	CARBON	1K	5%	1/4W
R552	1-247-883-00	CARBON	150K	5%	1/4W
R553	1-249-433-11	CARBON	22K	5%	1/4W
R554	1-102-074-00	CERAMIC	0.001MF	10%	50V
R555	1-247-855-31	CARBON	10K	5%	1/4W
R556	1-249-417-11	CARBON	1K	5%	1/4W
R557	1-249-420-11	CARBON	1.8K	5%	1/4W
R561	1-247-839-31	CARBON	2.2K	5%	1/4W
R562	1-249-419-11	CARBON	1.5K	5%	1/4W F
R563	1-260-126-11	CARBON	180K	5%	1/2W
R564	1-249-438-11	CARBON	56K	5%	1/4W
R565	1-249-438-11	CARBON	56K	5%	1/4W
R566	1-247-847-31	CARBON	4.7K	5%	1/4W
R569	1-260-354-71	CARBON	150K	5%	1/2W
R571	1-249-409-11	CARBON	220	5%	1/4W
R601	1-202-961-11	CEMENTED	1.8	5%	10W
R602	1-202-961-11	CEMENTED	1.8	5%	10W
R606	1-215-915-11	METAL OXIDE	470	5%	3W F
R610	1-215-924-00	METAL OXIDE	15K	5%	3W F
R611	1-202-933-61	FUSIBLE	0.1	10%	1/2W F
R612	1-249-377-11	CARBON	0.47	5%	1/4W F
R613	1-249-377-11	CARBON	0.47	5%	1/4W F
R614	1-215-877-11	METAL OXIDE	22K	5%	1W F
R615	1-249-401-11	CARBON	47	5%	1/4W

A (KV-J21PF1)

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION			REMARK
R616	1-247-289-00	CARBON	8.2M	5%	1W
R617	1-215-924-00	METAL OXIDE	15K	5%	3W F
R618	1-249-377-11	CARBON	0.47	5%	1/4W F
R619	1-249-377-11	CARBON	0.47	5%	1/4W F
R622	1-217-192-21	METAL	0.22	10%	2W
R623	1-247-807-31	CARBON	100	5%	1/4W
R624	1-216-446-00	METAL OXIDE	18	5%	2W F
R625	1-249-424-11	CARBON	3.9K	5%	1/4W
R626	1-249-420-11	CARBON	1.8K	5%	1/4W
R627	1-249-417-11	CARBON	1K	5%	1/4W
R628	1-249-417-11	CARBON	1K	5%	1/4W
R629	1-249-399-11	CARBON	33	5%	1/4W
R632	1-249-381-11	CARBON	1	5%	1/4W
R636	1-215-924-00	METAL OXIDE	15K	5%	3W F
R801	1-215-920-11	METAL OXIDE	3.3K	5%	3W F
R802	1-249-385-11	CARBON	2.2	5%	1/4W F
R803	1-247-839-31	CARBON	2.2K	5%	1/4W
R804	1-249-417-11	CARBON	1K	5%	1/4W
R805	1-249-433-11	CARBON	22K	5%	1/4W
R809	1-247-756-11	CARBON	2.2K	5%	1/2W F
R811	1-216-343-00	METAL OXIDE	0.33	5%	1W F
R812	1-215-447-00	METAL	12K	1%	1/4W
R816	1-249-435-11	CARBON	33K	5%	1/4W
R820	1-249-419-11	CARBON	1.5K	5%	1/4W
R821	1-215-911-11	METAL OXIDE	100	5%	3W F
R822	1-216-429-00	METAL OXIDE	270	5%	1W F
R823	1-249-931-11	CARBON	2.2K	5%	1/4W F
R825	1-249-392-11	CARBON	8.2	5%	1/4W F
R826	1-249-422-11	CARBON	2.7K	5%	1/4W
R827	1-249-440-11	CARBON	82K	5%	1/4W
R828	1-249-424-11	CARBON	3.9K	5%	1/4W
R829	1-249-419-11	CARBON	1.5K	5%	1/4W
R831	1-215-863-11	METAL OXIDE	100	5%	1W F
R832	1-247-839-31	CARBON	2.2K	5%	1/4W
R834	1-247-855-31	CARBON	10K	5%	1/4W
R851	1-249-382-11	CARBON	1.2	5%	1/4W F
R852	1-249-923-11	CARBON	1K	5%	1/4W F
R853	1-249-377-11	CARBON	0.47	5%	1/4W F
R854	1-249-377-11	CARBON	0.47	5%	1/4W F
R855	1-202-818-00	SOLID	1K	20%	1/2W
R856	1-247-855-31	CARBON	10K	5%	1/4W
R857	1-249-438-11	CARBON	56K	5%	1/4W
R858	1-216-370-11	METAL OXIDE	1.2	5%	2W F
R860	1-247-887-00	CARBON	220K	5%	1/4W
R881	1-247-825-31	CARBON	560	5%	1/4W
R882	1-249-422-11	CARBON	2.7K	5%	1/4W
R883	1-247-903-00	CARBON	1M	5%	1/4W
R895	1-216-349-00	METAL OXIDE	1	5%	1W F
R898	1-247-839-31	CARBON	2.2K	5%	1/4W
R902	1-247-847-31	CARBON	4.7K	5%	1/4W
R904	1-247-847-31	CARBON	4.7K	5%	1/4W
R905	1-220-958-81	METAL	1K	5%	1/2W
R906	1-220-958-81	METAL	1K	5%	1/2W
R907	1-220-960-81	METAL	1.8K	5%	1/2W
R908	1-220-960-81	METAL	1.8K	5%	1/2W
R909	1-220-963-81	METAL	3.3K	5%	1/2W
R910	1-220-963-81	METAL	3.3K	5%	1/2W
R911	1-249-428-11	CARBON	8.2K	5%	1/4W
R913	1-247-823-31	CARBON	470	5%	1/4W
R914	1-247-823-31	CARBON	470	5%	1/4W
R915	1-249-428-11	CARBON	8.2K	5%	1/4W
R1201	1-249-404-00	CARBON	82	5%	1/4W
R1202	1-220-958-81	METAL	1K	5%	1/2W
R1203	1-249-437-11	CARBON	47K	5%	1/4W
R1204	1-249-437-11	CARBON	47K	5%	1/4W
R1205	1-249-404-00	CARBON	82	5%	1/4W
R1206	1-249-437-11	CARBON	47K	5%	1/4W
R1207	1-249-437-11	CARBON	47K	5%	1/4W
R1211	1-220-946-81	METAL	68	5%	1/2W
R1212	1-220-958-81	METAL	1K	5%	1/2W
R1213	1-220-958-81	METAL	1K	5%	1/2W
R1214	1-247-895-00	CARBON	470K	5%	1/4W
R1215	1-247-895-00	CARBON	470K	5%	1/4W
R1216	1-247-895-00	CARBON	470K	5%	1/4W
R1217	1-247-823-31	CARBON	470	5%	1/4W
R1219	1-247-855-31	CARBON	10K	5%	1/4W
R1220	1-220-958-81	METAL	1K	5%	1/2W
R1221	1-247-855-31	CARBON	10K	5%	1/4W
R1226	1-220-964-81	METAL	39K	5%	1/2W
R1227	1-220-964-81	METAL	39K	5%	1/2W
R1228	1-220-958-81	METAL	1K	5%	1/2W
R1229	1-247-823-31	CARBON	470	5%	1/4W
R1230	1-247-855-31	CARBON	10K	5%	1/4W
R1231	1-220-958-81	METAL	1K	5%	1/2W
R1232	1-249-424-11	CARBON	3.9K	5%	1/4W
R1233	1-220-961-81	METAL	2.2K	5%	1/2W
R1234	1-220-964-81	METAL	39K	5%	1/2W
R1235	1-220-964-81	METAL	39K	5%	1/2W
R1239	1-249-389-11	CARBON	4.7	5%	1/4W F
R1240	1-247-807-31	CARBON	100	5%	1/4W
R1241	1-220-958-81	METAL	1K	5%	1/2W
R1243	1-247-807-31	CARBON	100	5%	1/4W
R1246	1-249-411-11	CARBON	330	5%	1/4W
R1247	1-247-823-31	CARBON	470	5%	1/4W
R1248	1-220-958-81	METAL	1K	5%	1/2W
R1249	1-247-823-31	CARBON	470	5%	1/4W
R1250	1-247-901-11	CARBON	820K	5%	1/4W
R1251	1-247-901-11	CARBON	820K	5%	1/4W
R1252	1-220-961-81	METAL	2.2K	5%	1/2W
R1253	1-249-418-11	CARBON	1.2K	5%	1/4W
R1513	1-247-855-31	CARBON	10K	5%	1/4W
R1514	1-247-847-31	CARBON	4.7K	5%	1/4W
R1515	1-247-807-31	CARBON	100	5%	1/4W

<SWITCH>

S601	⚠ 1-571-433-31	SWITCH, PUSH (AC POWER)	
S801	1-572-707-11	SWITCH, LEVER	
S901	1-570-577-41	SWITCH, PUSH	
S902	1-570-577-41	SWITCH, PUSH	
S903	1-570-577-41	SWITCH, PUSH	
S904	1-570-577-41	SWITCH, PUSH	
S905	1-570-577-41	SWITCH, PUSH	

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

A (KV-J21PF1) **A3 (KV-J21MN1AK only)**

REF. NO.		PART NO.	DESCRIPTION			REMARK
			<SPARK GAP>			
SG801		1-519-422-11	GAP, SPARK			
			<SURFACE WAVE FILTER>			
SWF401		1-577-169-12	SAWF			
			<TRANSFORMER>			
T601	⚠	1-429-137-21	TRANSFORMER, CONVERTER (SRT)			
T605	⚠	1-431-383-21	TRANSFORMER, LINE FILTER			
T801		1-437-195-11	TRANSFORMER, HORIZONTAL DRIVE			
T851	⚠	1-453-193-21	TRANSFORMER ASSY, FLYBACK			
			<THERMISTOR>			
THP601	⚠	1-808-059-31	THERMISTOR, POSITIVE			
			<TUNER>			
TU101	⚠	8-598-323-30	TUNER, VSS BT-AG401			
			<CRYSTAL>			
X101		1-577-082-11	VIBRATOR, CERAMIC			
X300		1-411-752-11	COIL			
X358		1-567-505-11	OSCILLATOR, CRYSTAL			
X443		1-567-504-11	OSCILLATOR, CRYSTAL			
**********						
		A-1298-553-A	A3 BOARD, COMPLETE (KV-J21MN1AK ONLY)			
			**********			
			<CAPACITOR>			
C1201		1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1202		1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1205		1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C1206		1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C1207		1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1208		1-163-083-00	CERAMIC CHIP	1PF	0.25PF	50V
C1209		1-163-109-00	CERAMIC CHIP	47PF	5%	50V
C1210		1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C1211		1-124-584-00	ELECT	100MF	20%	10V
C1212		1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C1213		1-126-151-11	ELECT	4.7MF	20%	16V
C1214		1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C1215		1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1216		1-125-798-51	ELECT	0.47MF	20%	63V
C1217		1-163-033-91	CERAMIC CHIP	0.022MF		50V
C1218		1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1219		1-124-584-00	ELECT	100MF	20%	10V
C1221		1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1222		1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1223		1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1224		1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1225		1-163-093-00	CERAMIC CHIP	10PF	5%	50V
C1226		1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C1227		1-163-131-00	CERAMIC CHIP	390PF	5%	50V
C1228		1-163-131-00	CERAMIC CHIP	390PF	5%	50V
C1229		1-126-157-11	ELECT	10MF	20%	16V
C1230		1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1231		1-126-157-11	ELECT	10MF	20%	16V
C1232		1-124-234-00	ELECT	22MF	20%	16V
C1233		1-126-962-11	ELECT	3.3MF	20%	50V
C1234		1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1235		1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C1236		1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C1237		1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C1238		1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1239		1-126-157-11	ELECT	10MF	20%	16V
C1240		1-164-222-11	CERAMIC CHIP	0.22MF		25V
C1241		1-125-794-51	ELECT	47MF	20%	16V
C1242		1-104-760-11	CERAMIC CHIP	0.047MF	10%	50V
C1243		1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1244		1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1245		1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C1246		1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C1247		1-163-229-11	CERAMIC CHIP	12PF	5%	50V
C1248		1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C1250		1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C1252		1-216-295-91	SHORT	0		
C1253		1-216-295-91	SHORT	0		
C1254		1-124-234-00	ELECT	22MF	20%	16V
C1255		1-124-584-00	ELECT	100MF	20%	10V
C1256		1-164-005-11	CERAMIC CHIP	0.47MF		25V
C1257		1-164-222-11	CERAMIC CHIP	0.22MF		25V
C1258		1-163-033-91	CERAMIC CHIP	0.022MF		50V
C1260		1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C1261		1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C1262		1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C1263		1-163-137-00	CERAMIC CHIP	680PF	5%	50V
C1264		1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C1265		1-124-234-00	ELECT	22MF	20%	16V
C1266		1-125-794-51	ELECT	47MF	20%	16V
C1267		1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C1268		1-124-584-00	ELECT	100MF	20%	10V
			<CONNECTOR>			
CN1201		1-691-109-11	PLUG (L TYPE) 12P			
			<DIODE>			
D1201		8-719-908-03	DIODE GP08D			
			<FERRITE BEAD>			
FB1201		1-412-911-31	FERRITE	0UH		
FB1202		1-412-911-31	FERRITE	0UH		

A3 (KV-J21MN1AK only)

REF. NO.	PART NO.	DESCRIPTION			REMARK
FB1203	1-412-911-31	FERRITE	0UH		
FB1204	1-412-911-31	FERRITE	0UH		
FB1205	1-412-911-31	FERRITE	0UH		
FB1206	1-412-911-31	FERRITE	0UH		
		<FILTER>			
FL1201	1-239-803-11	ENCAPSULATED COMPONENT			
		<IC>			
IC1201	8-752-059-57	IC CXA1110BS			
IC1202	8-759-429-98	IC MSP3410B-PP-F7			
IC1203	8-759-231-53	IC TA7805S			
		<CHIP CONDUCTOR>			
JR1	1-216-295-91	SHORT	0		
JR2	1-216-295-91	SHORT	0		
JR3	1-216-295-91	SHORT	0		
JR4	1-216-295-91	SHORT	0		
JR5	1-216-295-91	SHORT	0		
JR6	1-216-295-91	SHORT	0		
JR7	1-216-295-91	SHORT	0		
JR8	1-216-295-91	SHORT	0		
JR9	1-216-295-91	SHORT	0		
JR10	1-216-295-91	SHORT	0		
JR11	1-216-295-91	SHORT	0		
		<COIL>			
L1201	1-408-399-00	INDUCTOR	1.5UH		
L1202	1-412-010-41	INDUCTOR CHIP	22UH		
L1203	1-408-602-11	INDUCTOR	8.2UH		
L1204	1-408-591-11	INDUCTOR	1UH		
L1205	1-408-602-11	INDUCTOR	8.2UH		
L1206	1-412-951-11	INDUCTOR	10UH		
L1207	1-412-951-11	INDUCTOR	10UH		
		<TRANSISTOR>			
Q1201	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q1203	8-729-266-92	TRANSISTOR 2SC2669-O			
Q1205	8-729-216-22	TRANSISTOR 2SA1162-G			
Q1206	8-729-216-22	TRANSISTOR 2SA1162-G			
Q1207	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q1211	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q1212	8-729-230-49	TRANSISTOR 2SC2712-YG			
		<RESISTOR>			
R1201	1-216-022-00	RES,CHIP	75	5%	1/10W
R1202	1-216-085-00	RES,CHIP	33K	5%	1/10W
R1203	1-216-081-00	RES,CHIP	22K	5%	1/10W
R1204	1-216-035-00	RES,CHIP	270	5%	1/10W
R1205	1-216-027-00	RES,CHIP	120	5%	1/10W
R1207	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R1209	1-216-035-00	RES,CHIP	270	5%	1/10W
R1210	1-216-041-00	RES,CHIP	470	5%	1/10W
R1211	1-216-015-00	RES,CHIP	39	5%	1/10W
R1212	1-216-097-91	RES,CHIP	100K	5%	1/10W
R1213	1-216-097-91	RES,CHIP	100K	5%	1/10W
R1214	1-216-033-00	RES,CHIP	220	5%	1/10W
R1217	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1218	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1219	1-216-047-91	RES,CHIP	820	5%	1/10W
R1220	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1223	1-216-051-00	RES,CHIP	1.2K	5%	1/10W
R1224	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R1225	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R1226	1-216-295-91	SHORT	0		
R1227	1-216-295-91	SHORT	0		
R1228	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1229	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R1230	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R1231	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1232	1-216-027-00	RES,CHIP	120	5%	1/10W
R1233	1-216-045-00	RES,CHIP	680	5%	1/10W
R1234	1-216-045-00	RES,CHIP	680	5%	1/10W
R1240	1-216-041-00	RES,CHIP	470	5%	1/10W
R1241	1-216-075-00	RES,CHIP	12K	5%	1/10W
R1242	1-216-027-00	RES,CHIP	120	5%	1/10W
R1243	1-216-037-00	RES,CHIP	330	5%	1/10W
R1244	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R1245	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1246	1-260-306-51	CARBON	15	5%	1/2W
		<SWITCH>			
SW1201	1-579-560-11	FILTER, SAWTOOTH WAVE			
SW1202	1-579-559-11	FILTER, SAWTOOTH WAVE			
		<TRANSFORMER>			
T1202	1-416-000-11	COIL			
		<CRYSTAL>			
X1201	1-760-094-11	VIBRATOR, CRYSTAL			

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A11 **A12** (Except for KV-J21MF3)

REF. NO.	PART NO.	DESCRIPTION			REMARK
*	A-1294-197-A	A11 BOARD, COMPLETE (KV-J21MF1AK/J21MN1AK) **********			
*	A-1293-714-A	A11 BOARD, COMPLETE (KV-J21MF3) **********			
		<CAPACITOR>			
C409	1-101-880-00	CERAMIC	47PF	5% 50V	
C411	1-101-888-00	CERAMIC	68PF	5% 50V	
C412	1-101-888-00	CERAMIC	68PF	5% 50V	
C414	1-102-973-00	CERAMIC	100PF	5% 50V	
C416	1-102-973-00	CERAMIC	100PF	5% 50V	
C417	1-102-973-00	CERAMIC	100PF	5% 50V	
C418	1-102-820-00	CERAMIC	330PF	5% 50V	
C419	1-102-973-00	CERAMIC	100PF	5% 50V	
C422	1-102-820-00	CERAMIC	330PF	5% 50V	
C424	1-102-824-00	CERAMIC	470PF	5% 50V	
		<FILTER>			
CF45	1-767-220-11	FILTER, CERAMIC			
CF60	1-567-100-00	FILTER, CERAMIC			
CF65	1-567-101-11	FILTER, CERAMIC			
		<CONNECTOR>			
CN401 *	1-778-603-11	PIN, CONNECTOR (PC BOARD) 12P			
		<TRIMMER>			
CT45	1-579-690-11	TRAP, CERAMIC			
CT60	1-409-429-11	TRAP, CERAMIC			
CT65	1-409-327-00	TRAP, CERAMIC (6.5MHZ)			
		<DIODE>			
D402	8-719-911-19	DIODE 1SS119-25			
		<IC>			
IC401	8-759-800-65	IC LA7910			
		<COIL>			
L403	1-410-510-11	INDUCTOR	12UH		
L404	1-410-508-11	INDUCTOR	8.2UH		
L405	1-410-508-11	INDUCTOR	8.2UH		
L407	1-410-511-11	INDUCTOR	15UH		
L408	1-410-500-11	INDUCTOR	1.8UH		
L409	1-410-501-51	INDUCTOR	2.2UH		
L411	1-410-502-11	INDUCTOR	2.7UH		
		<TRANSISTOR>			
Q405	8-729-119-76	TRANSISTOR 2SA1175-HFE			
Q407	8-729-119-76	TRANSISTOR 2SA1175-HFE			
Q410	8-729-119-76	TRANSISTOR 2SA1175-HFE			
Q411	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q412	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q413	8-729-029-92	TRANSISTOR DTC143ESA			
Q415	8-729-029-92	TRANSISTOR DTC143ESA			
Q416	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q418	8-729-029-92	TRANSISTOR DTC143ESA			
		<RESISTOR>			
R414	1-247-823-31	CARBON	470	5% 1/4W	
R415	1-249-409-11	CARBON	220	5% 1/4W	
R417	1-249-409-11	CARBON	220	5% 1/4W	
R418	1-249-415-11	CARBON	680	5% 1/4W	
R422	1-247-809-31	CARBON	120	5% 1/4W	
R423	1-249-407-11	CARBON	150	5% 1/4W	
R427	1-249-411-11	CARBON	330	5% 1/4W	
R428	1-249-433-11	CARBON	22K	5% 1/4W	
R430	1-247-823-31	CARBON	470	5% 1/4W	
R431	1-249-433-11	CARBON	22K	5% 1/4W	
R432	1-247-823-31	CARBON	470	5% 1/4W	
R435	1-247-823-31	CARBON	470	5% 1/4W	
R436	1-249-433-11	CARBON	22K	5% 1/4W	
R437	1-249-433-11	CARBON	22K	5% 1/4W	

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*	A-1294-182-A	A12 BOARD, COMPLETE (KV-J21MF1AK/J21MN1AK/J21PF1) **********			
		<CAPACITOR>			
C201	1-125-799-51	ELECT	1MF	20% 63V	
C202	1-125-804-51	ELECT	100MF	20% 16V	
C203	1-125-799-51	ELECT	1MF	20% 63V	
C204	1-125-804-51	ELECT	100MF	20% 16V	
C205	1-136-159-00	FILM	0.033MF	5% 50V	
C206	1-130-480-00	MYLAR	0.0056MF	5% 50V	
C207	1-125-800-51	ELECT	2.2MF	20% 63V	
C208	1-125-800-51	ELECT	2.2MF	20% 63V	
C209	1-130-480-00	MYLAR	0.0056MF	5% 50V	
C210	1-136-159-00	FILM	0.033MF	5% 50V	
C211	1-136-165-00	FILM	0.1MF	5% 50V	
C1212	1-125-799-51	ELECT	1MF	20% 63V	
C1219	1-125-804-51	ELECT	100MF	20% 16V	
C1222	1-136-173-00	FILM	0.47MF	5% 50V	
C1223	1-125-799-51	ELECT	1MF	20% 63V	
C1225	1-136-173-00	FILM	0.47MF	5% 50V	
C1228	1-125-799-51	ELECT	1MF	20% 63V	
		<CONNECTOR>			
CN1211 *	1-778-603-11	PIN, CONNECTOR (PC BOARD) 12P			
CN1212 *	1-778-603-11	PIN, CONNECTOR (PC BOARD) 12P			

A12 (Except for KV-J21MF3) A12 (KV-J21MF3) C

REF. NO.	PART NO.	DESCRIPTION			REMARK
		<DIODE>			
D1209	8-719-121-24	DIODE RD9.1ESL			
		<IC>			
IC201	8-759-090-21	IC TDA8424			
IC202	8-759-708-12	IC NJM78L12A			
IC1211	8-759-711-23	IC NJM2234L			
IC1212	8-759-711-23	IC NJM2234L			
		<TRANSISTOR>			
Q1205	8-729-119-76	TRANSISTOR 2SA1175-HFE			
		<RESISTOR>			
R203	1-220-951-31	METAL	220	5%	1/2W
R204	1-220-951-31	METAL	220	5%	1/2W
R1222	1-220-958-31	METAL	1K	5%	1/2W
R1223	1-220-969-31	METAL	10K	5%	1/2W
R1224	1-220-969-31	METAL	10K	5%	1/2W
R1242	1-220-958-31	METAL	1K	5%	1/2W
R1244	1-220-948-31	METAL	100	5%	1/2W

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*	A-1294-149-A	A12 BOARD, COMPLETE (KV-J21MF3)			
		**********			
		<CAPACITOR>			
C201	1-126-960-11	ELECT	1MF	20%	50V
C202	1-126-933-11	ELECT	100MF	20%	16V
C203	1-126-960-11	ELECT	1MF	20%	50V
C204	1-126-933-11	ELECT	100MF	20%	16V
C205	1-136-159-00	FILM	0.033MF	5%	50V
C206	1-130-480-00	MYLAR	0.0056MF	5%	50V
C207	1-126-961-11	ELECT	2.2MF	20%	50V
C208	1-126-961-11	ELECT	2.2MF	20%	50V
C209	1-130-480-00	MYLAR	0.0056MF	5%	50V
C210	1-136-159-00	FILM	0.033MF	5%	50V
C211	1-136-165-00	FILM	0.1MF	5%	50V
C1212	1-126-960-11	ELECT	1MF	20%	50V
C1219	1-126-933-11	ELECT	100MF	20%	16V
C1222	1-136-173-00	FILM	0.47MF	5%	50V
C1223	1-126-960-11	ELECT	1MF	20%	50V
C1225	1-136-173-00	FILM	0.47MF	5%	50V
C1228	1-126-960-11	ELECT	1MF	20%	50V
		<CONNECTOR>			
CN1211*	1-778-603-11	PIN, CONNECTOR (PC BOARD) 12P			
CN1212*	1-778-603-11	PIN, CONNECTOR (PC BOARD) 12P			

REF. NO.	PART NO.	DESCRIPTION			REMARK
		<DIODE>			
D1209	8-719-121-24	DIODE RD9.1ESL			
		<IC>			
IC201	8-759-090-21	IC TDA8424			
IC202	8-759-708-12	IC NJM78L12A			
IC1211	8-759-711-23	IC NJM2234L			
IC1212	8-759-711-23	IC NJM2234L			
		<TRANSISTOR>			
Q1205	8-729-119-76	TRANSISTOR 2SA1175-HFE			
		<RESISTOR>			
R203	1-249-409-11	CARBON	220	5%	1/4W
R204	1-249-409-11	CARBON	220	5%	1/4W
R1222	1-249-417-11	CARBON	1K	5%	1/4W
R1223	1-247-855-31	CARBON	10K	5%	1/4W
R1224	1-247-855-31	CARBON	10K	5%	1/4W
R1242	1-249-417-11	CARBON	1K	5%	1/4W
R1244	1-247-807-31	CARBON	100	5%	1/4W

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*	A-1331-799-A	C BOARD, COMPLETE (KV-J21MF1AK/J21MN1AK/J21PF1)			
		**********			
*	A-1331-697-A	C BOARD, COMPLETE (KV-J21MF3)			
		**********			
	4-382-854-11	SCREW (M3X10), P, SW (+)			
		<CAPACITOR>			
C701	1-162-114-00	CERAMIC	0.0047MF		2KV
C702	1-102-074-00	CERAMIC	0.001MF	10%	50V
C703	1-107-651-11	ELECT	4.7MF	20%	250V
C704	1-130-202-00	FILM	0.022MF	5%	400V
C708	1-102-114-00	CERAMIC	470PF	10%	50V
C709	1-102-114-00	CERAMIC	470PF	10%	50V
C710	1-102-114-00	CERAMIC	470PF	10%	50V
C712	1-102-115-00	CERAMIC	560PF	10%	50V
C713	1-102-115-00	CERAMIC	560PF	10%	50V
C714	1-102-115-00	CERAMIC	560PF	10%	50V
C716	1-124-122-11	ELECT (KV-J21MF1AK/J21MN1AK/J21PF1)	100MF	20%	50V
C716	1-126-968-11	ELECT (KV-J21MF3)	100MF	20%	50V
C736	1-102-114-00	CERAMIC	470PF	10%	50V
C737	1-102-114-00	CERAMIC	470PF	10%	50V
C746	1-102-114-00	CERAMIC	470PF	10%	50V

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

C K (KV-J21MF1AK / KV-J21MN1AK)

REF. NO.		PART NO.	DESCRIPTION					REMARK
			<CONNECTOR>					
CN701		1-508-766-00	PIN, CONNECTOR (5MM PITCH) 4P					
CN703	*	1-564-509-11	PLUG, CONNECTOR 6P					
CN704		1-695-915-11	TAB (CONTACT)					
			<DIODE>					
D701		8-719-911-19	DIODE 1SS119-25					
D702		8-719-911-19	DIODE 1SS119-25					
D703		8-719-911-19	DIODE 1SS119-25					
D707		8-719-911-19	DIODE 1SS119-25					
D708		8-719-911-19	DIODE 1SS119-25					
D709		8-719-911-19	DIODE 1SS119-25					
D710		8-719-911-19	DIODE 1SS119-25					
D711		8-719-911-19	DIODE 1SS119-25					
D712		8-719-911-19	DIODE 1SS119-25					
D716		8-719-911-19	DIODE 1SS119-25					
D717		8-719-121-24	DIODE RD9.1ESL					
			<JACK>					
J701	⚠	1-251-239-11	SOCKET, CRT					
			<COIL>					
L701		1-410-667-31	INDUCTOR	22UH				
			<TRANSISTOR>					
Q704		8-729-326-11	TRANSISTOR 2SC2611					
Q705		8-729-326-11	TRANSISTOR 2SC2611					
Q706		8-729-326-11	TRANSISTOR 2SC2611					
Q707		8-729-200-17	TRANSISTOR 2SA1091-O					
Q708		8-729-200-17	TRANSISTOR 2SA1091-O					
Q709		8-729-200-17	TRANSISTOR 2SA1091-O					
Q710		8-729-119-78	TRANSISTOR 2SC2785-HFE					
Q711		8-729-119-78	TRANSISTOR 2SC2785-HFE					
Q712		8-729-119-78	TRANSISTOR 2SC2785-HFE					
			<RESISTOR>					
R702		1-244-941-00	CARBON	680K	5%	1/2W		
R703		1-249-496-11	CARBON	100K	5%	1/2W		
R705		1-216-393-00	METAL OXIDE	2.2	5%	3W	F	
R710		1-215-922-11	METAL OXIDE	6.8K	5%	3W	F	
R711		1-247-763-11	CARBON	8.2K	5%	1/2W		
R712		1-215-922-11	METAL OXIDE	6.8K	5%	3W	F	
R713		1-247-763-11	CARBON	8.2K	5%	1/2W		
R714		1-215-922-11	METAL OXIDE	6.8K	5%	3W	F	
R715		1-247-763-11	CARBON	8.2K	5%	1/2W		
R719		1-215-480-00	METAL	300K	1%	1/4W		
R720		1-249-923-11	CARBON	1K	5%	1/4W	F	
R721		1-215-489-00	METAL	680K	1%	1/4W		
R722		1-249-923-11	CARBON	1K	5%	1/4W	F	
R723		1-215-479-00	METAL	270K	1%	1/4W		
R724		1-249-923-11	CARBON	1K	5%	1/4W	F	

REF. NO.	PART NO.	DESCRIPTION				REMARK
R725	1-220-959-81	METAL (KV-J21MF1AK/J21MN1AK/J21PF1)	1.5K	5%	1/2W	
R725	1-249-419-11	CARBON (KV-J21MF3)	1.5K	5%	1/4W	
R726	1-220-959-81	METAL (KV-J21MF1AK/J21MN1AK/J21PF1)	1.5K	5%	1/2W	
R726	1-249-419-11	CARBON (KV-J21MF3)	1.5K	5%	1/4W	
R727	1-220-959-81	METAL (KV-J21MF1AK/J21MN1AK/J21PF1)	1.5K	5%	1/2W	
R727	1-249-419-11	CARBON (KV-J21MF3)	1.5K	5%	1/4W	
R728	1-249-407-11	CARBON	150	5%	1/4W	
R729	1-249-408-11	CARBON	180	5%	1/4W	
R730	1-249-408-11	CARBON	180	5%	1/4W	
R731	1-247-807-31	CARBON	100	5%	1/4W	
R732	1-247-807-31	CARBON	100	5%	1/4W	
R733	1-247-807-31	CARBON	100	5%	1/4W	
R734	1-247-739-11	CARBON	100	5%	1/2W	
R738	1-247-807-31	CARBON	100	5%	1/4W	
R739	1-247-807-31	CARBON	100	5%	1/4W	
R740	1-247-807-31	CARBON	100	5%	1/4W	
R755	1-249-418-11	CARBON	1.2K	5%	1/4W	
R756	1-249-418-11	CARBON	1.2K	5%	1/4W	
R757	1-249-418-11	CARBON	1.2K	5%	1/4W	
		<VARIABLE RESISTOR>				
RV701	1-230-641-11	RES, ADJ, METAL GLAZE 2.2M				

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*	A-1380-580-A	K BOARD, COMPLETE (KV-J21MF1AK/J21MN1AK ONLY)	
		**********	
	4-352-844-01	PIN, LEAD, COATING	
		<CAPACITOR>	
C1501	1-136-165-00	FILM	0.1MF 5% 50V
C1502	1-136-165-00	FILM	0.1MF 5% 50V
C1503	1-136-169-00	FILM	0.22MF 5% 50V
C1505	1-125-806-51	ELECT	220MF 20% 16V
C1506	1-128-551-11	ELECT	22MF 20% 25V
C1507	1-125-806-51	ELECT	220MF 20% 16V
C1508	1-125-800-51	ELECT	2.2MF 20% 63V
C1513	1-126-960-11	ELECT	1MF 20% 50V
C1514	1-128-551-11	ELECT	22MF 20% 25V
C1515	1-125-804-51	ELECT	100MF 20% 16V
C1516	1-125-797-51	ELECT	10MF 20% 50V
C1517	1-125-800-51	ELECT	2.2MF 20% 63V
C1519	1-125-806-51	ELECT	220MF 20% 16V
C1521	8-719-109-84	DIODE RD5.1ESB1	
C1524	1-126-943-11	ELECT	2200MF 20% 25V
C1525	1-125-808-51	ELECT	470MF 20% 35V
C1526	1-125-808-51	ELECT	470MF 20% 35V

K (KV-J21MF1AK, KV-J21MN1AK) **K1** (KV-J21MF1AK, KV-J21MN1AK) **VM** (KV-J21MF1AK, KV-J21MN1AK)

REF. NO.	PART NO.	DESCRIPTION				REMARK
C1527	1-136-165-00	FILM	0.1MF	5%	50V	
C1528	1-126-953-11	ELECT	2200MF	20%	35V	
C1529	1-126-953-11	ELECT	2200MF	20%	35V	
		<CONNECTOR>				
CN1501*	1-564-508-11	PLUG, CONNECTOR 5P				
CN1502*	1-564-507-11	PLUG, CONNECTOR 4P				
CN1503*	1-564-506-11	PLUG, CONNECTOR 3P				
CN1504	1-564-506-11	PLUG, CONNECTOR 3P				
		<DIODE>				
D1501	8-719-911-19	DIODE 1SS119-25				
D1502	8-719-110-72	DIODE RD30ESB2				
D1503	8-719-110-72	DIODE RD30ESB2				
		<IC>				
IC1501	8-759-980-43	IC TDA2009A				
		<IC LINK>				
PS1501	1-532-984-11	LINK, IC 2A/90V				
		<TRANSISTOR>				
Q1503	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q1504	8-729-202-67	TRANSISTOR 2SK246-GR3				
		<RESISTOR>				
R1501	1-249-385-11	CARBON	2.2	5%	1/4W	
R1502	1-249-385-11	CARBON	2.2	5%	1/4W	
R1503	1-220-958-81	METAL	1K	5%	1/2W	
R1504	1-220-961-81	METAL	2.2K	5%	1/2W	
R1505	1-249-400-11	CARBON	39	5%	1/4W	
R1506	1-249-400-11	CARBON	39	5%	1/4W	
R1512	1-247-855-31	CARBON	10K	5%	1/4W	
R1516	1-247-855-31	CARBON	10K	5%	1/4W	
R1517	1-249-401-11	CARBON	47	5%	1/4W	
R1518	1-247-825-31	CARBON	560	5%	1/4W	
R1521	1-249-432-11	CARBON	18K	5%	1/4W	
R1522	1-247-847-31	CARBON	4.7K	5%	1/4W	
R1523	1-220-961-81	METAL	2.2K	5%	1/2W	
R1524	1-249-438-11	CARBON	56K	5%	1/4W	
R1525	1-249-398-11	CARBON	27	5%	1/4W	
R1526	1-220-959-81	METAL	1.5K	5%	1/2W	
R1528	1-220-959-81	METAL	1.5K	5%	1/2W	
R1534	1-216-388-11	METAL OXIDE	0.82	5%	3W	F

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REF. NO.	PART NO.	DESCRIPTION				REMARK
*	A-1380-581-A	K1 BOARD, COMPLETE (KV-J21MF1AK/J21MN1AK ONLY) **********				
		<CONNECTOR>				
CN3251*	1-564-506-11	PLUG, CONNECTOR 3P				
		<JACK>				
J3251	1-536-707-21	TERMINAL, PUSH (2P)				

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*	A-1342-422-A	VM BOARD, COMPLETE (KV-J21MF1AK/J21MN1AK) **********				
	4-382-854-11	SCREW (M3X10), P, SW (+)				
		<CAPACITOR>				
C1722	1-102-115-00	CERAMIC	560PF	10%	50V	
C1724	1-102-961-00	CERAMIC	27PF	5%	50V	
C1751	1-136-153-00	FILM	0.01MF	5%	50V	
C1761	1-161-830-00	CERAMIC	0.0047MF	99%	500V	
C1763	1-107-638-11	ELECT	33MF	20%	160V	
C1764	1-125-804-51	ELECT	100MF	20%	16V	
C1768	1-107-368-11	MYLAR	0.047MF	99%	200V	
C1769	1-107-667-11	ELECT	2.2MF	20%	160V	
C1770	1-104-999-11	MYLAR	0.1MF	10%	200V	
C1771	1-125-797-51	ELECT	10MF	20%	50V	
C1772	1-125-804-51	ELECT	100MF	20%	16V	
C1773	1-107-368-11	MYLAR	0.047MF	99%	200V	
C1775	1-125-804-51	ELECT	100MF	20%	16V	
C1776	1-125-797-51	ELECT	10MF	20%	50V	
C1778	1-130-471-51	MYLAR	0.001MF	5%	50V	
C1779	1-130-471-51	MYLAR	0.001MF	5%	50V	
C1780	1-125-797-51	ELECT	10MF	20%	50V	
		<CONNECTOR>				
CN1701	1-564-511-11	PLUG, CONNECTOR 8P				
		<DIODE>				
D1761	8-719-911-19	DIODE 1SS119-25				
D1763	8-719-911-19	DIODE 1SS119-25				
D1764	8-719-911-19	DIODE 1SS119-25				
D1767	8-719-110-88	DIODE RD39ESB2				
D1768	8-719-110-88	DIODE RD39ESB2				
		<COIL>				
L1721	1-414-191-11	INDUCTOR	150UH			
L1722	1-408-621-31	INDUCTOR	330UH			

VM (KV-J21MF1AK KV-J21MN1AK) **VM (KV-J21MF3)**

REF. NO.	PART NO.	DESCRIPTION				REMARK
L1723	1-414-182-11	INDUCTOR	6.8UH			
L1761	1-410-478-11	INDUCTOR	47UH			
L1762	1-408-610-31	INDUCTOR	39UH			
		<TRANSISTOR>				
Q1722	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q1723	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q1756	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q1761	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q1762	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q1763	8-729-017-05	TRANSISTOR 2SA1837				
Q1764	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q1765	8-729-017-06	TRANSISTOR 2SC4793				
Q1766	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q1767	8-729-142-86	TRANSISTOR 2SC3733				
Q1777	8-729-326-11	TRANSISTOR 2SC2611				
		<RESISTOR>				
R1721	1-247-825-31	CARBON	560	5%	1/4W	
R1722	1-249-412-11	CARBON	390	5%	1/4W	
R1723	1-249-407-11	CARBON	150	5%	1/4W	
R1724	1-249-407-11	CARBON	150	5%	1/4W	
R1725	1-249-412-11	CARBON	390	5%	1/4W	
R1727	1-220-963-81	METAL	3.3K	5%	1/2W	
R1728	1-247-855-31	CARBON	10K	5%	1/4W	
R1732	1-125-797-51	ELECT	10MF	20%	50V	
R1736	1-220-959-81	METAL	1.5K	5%	1/2W	
R1753	1-249-434-11	CARBON	27K	5%	1/4W	
R1762	1-249-409-11	CARBON	220	5%	1/4W	
R1764	1-247-734-11	CARBON	39	5%	1/2W	F
R1765	1-249-414-11	CARBON	560	5%	1/4W	F
R1766	1-249-418-11	CARBON	1.2K	5%	1/4W	
R1768	1-220-961-81	METAL	2.2K	5%	1/2W	
R1769	1-249-384-11	CARBON	1.8	5%	1/4W	F
R1770	1-249-435-11	CARBON	33K	5%	1/4W	
R1772	1-249-432-11	CARBON	18K	5%	1/4W	
R1774	1-215-912-11	METAL OXIDE	150	5%	3W	F
R1775	1-249-417-11	CARBON	1K	5%	1/4W	F
R1776	1-249-432-11	CARBON	18K	5%	1/4W	
R1777	1-249-438-11	CARBON	56K	5%	1/4W	
R1778	1-249-430-11	CARBON	12K	5%	1/4W	
R1779	1-247-825-31	CARBON	560	5%	1/4W	
R1780	1-249-418-11	CARBON	1.2K	5%	1/4W	
R1781	1-249-410-11	CARBON	270	5%	1/4W	
R1782	1-249-384-11	CARBON	1.8	5%	1/4W	F
R1784	1-247-807-31	CARBON	100	5%	1/4W	
R1785	1-249-400-11	CARBON	39	5%	1/4W	F
R1786	1-249-435-11	CARBON	33K	5%	1/4W	
R1787	1-249-428-11	CARBON	8.2K	5%	1/4W	
R1788	1-220-959-81	METAL	1.5K	5%	1/2W	
R1789	1-247-823-31	CARBON	470	5%	1/4W	
R1790	1-216-451-11	METAL OXIDE	120	5%	2W	F
R1791	1-249-411-11	CARBON	330	5%	1/4W	
R1812	1-247-847-31	CARBON	4.7K	5%	1/4W	
R1851	1-249-393-11	CARBON	10	5%	1/4W	

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*	A-1342-403-A	VM BOARD, COMPLETE (KV-J21MF3)				
		**********				
	4-382-854-11	SCREW (M3X10), P, SW (+)				
		<CAPACITOR>				
C1722	1-102-115-00	CERAMIC	560PF	10%	50V	
C1724	1-102-961-00	CERAMIC	27PF	5%	50V	
C1751	1-136-153-00	FILM	0.01MF	5%	50V	
C1761	1-161-830-00	CERAMIC	0.0047MF	99%	500V	
C1763	1-107-638-11	ELECT	33MF	20%	160V	
C1764	1-126-933-11	ELECT	100MF	20%	16V	
C1768	1-107-368-11	MYLAR	0.047MF	99%	200V	
C1769	1-107-667-11	ELECT	2.2MF	20%	160V	
C1770	1-104-999-11	MYLAR	0.1MF	10%	200V	
C1771	1-126-964-51	ELECT	10MF	20%	50V	
C1772	1-126-933-11	ELECT	100MF	20%	16V	
C1773	1-107-368-11	MYLAR	0.047MF	99%	200V	
C1775	1-126-933-11	ELECT	100MF	20%	16V	
C1776	1-126-964-51	ELECT	10MF	20%	50V	
C1778	1-130-471-51	MYLAR	0.001MF	5%	50V	
C1779	1-130-471-51	MYLAR	0.001MF	5%	50V	
C1780	1-126-964-51	ELECT	10MF	20%	50V	
		<CONNECTOR>				
CN1701	1-564-511-11	PLUG, CONNECTOR 8P				
		<DIODE>				
D1761	8-719-911-19	DIODE 1SS119-25				
D1763	8-719-911-19	DIODE 1SS119-25				
D1764	8-719-911-19	DIODE 1SS119-25				
D1767	8-719-110-88	DIODE RD39ESB2				
D1768	8-719-110-88	DIODE RD39ESB2				
		<COIL>				
L1721	1-414-191-11	INDUCTOR	150UH			
L1722	1-408-621-31	INDUCTOR	330UH			
L1723	1-414-182-11	INDUCTOR	6.8UH			
L1761	1-410-478-11	INDUCTOR	47UH			
L1762	1-408-610-31	INDUCTOR	39UH			
		<TRANSISTOR>				
Q1722	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q1723	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q1756	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q1761	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q1762	8-729-119-76	TRANSISTOR 2SA1175-HFE				

VM (KV-J21MF3)

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION				REMARK
Q1763	8-729-017-05	TRANSISTOR 2SA1837				
Q1764	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q1765	8-729-017-06	TRANSISTOR 2SC4793				
Q1766	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q1767	8-729-142-86	TRANSISTOR 2SC3733				
Q1777	8-729-326-11	TRANSISTOR 2SC2611				
		<RESISTOR>				
R1721	1-247-825-31	CARBON	560	5%	1/4W	
R1722	1-249-412-11	CARBON	390	5%	1/4W	
R1723	1-249-407-11	CARBON	150	5%	1/4W	
R1724	1-249-407-11	CARBON	150	5%	1/4W	
R1725	1-249-412-11	CARBON	390	5%	1/4W	
R1727	1-247-843-11	CARBON	3.3K	5%	1/4W	
R1728	1-247-855-31	CARBON	10K	5%	1/4W	
R1732	1-126-964-51	ELECT	10MF	20%	50V	
R1736	1-249-419-11	CARBON	1.5K	5%	1/4W	
R1753	1-249-434-11	CARBON	27K	5%	1/4W	
R1762	1-249-409-11	CARBON	220	5%	1/4W	
R1764	1-247-734-11	CARBON	39	5%	1/2W	F
R1765	1-249-414-11	CARBON	560	5%	1/4W	F
R1766	1-249-418-11	CARBON	1.2K	5%	1/4W	
R1768	1-247-839-31	CARBON	2.2K	5%	1/4W	
R1769	1-249-384-11	CARBON	1.8	5%	1/4W	F
R1770	1-249-435-11	CARBON	33K	5%	1/4W	
R1772	1-249-432-11	CARBON	18K	5%	1/4W	
R1774	1-215-912-11	METAL OXIDE	150	5%	3W	F
R1775	1-249-417-11	CARBON	1K	5%	1/4W	F
R1776	1-249-432-11	CARBON	18K	5%	1/4W	
R1777	1-249-438-11	CARBON	56K	5%	1/4W	
R1778	1-249-430-11	CARBON	12K	5%	1/4W	
R1779	1-247-825-31	CARBON	560	5%	1/4W	
R1780	1-249-418-11	CARBON	1.2K	5%	1/4W	
R1781	1-249-410-11	CARBON	270	5%	1/4W	
R1782	1-249-384-11	CARBON	1.8	5%	1/4W	F
R1784	1-247-807-31	CARBON	100	5%	1/4W	
R1785	1-249-400-11	CARBON	39	5%	1/4W	F
R1786	1-249-435-11	CARBON	33K	5%	1/4W	
R1787	1-249-428-11	CARBON	8.2K	5%	1/4W	
R1788	1-249-419-11	CARBON	1.5K	5%	1/4W	
R1789	1-247-823-31	CARBON	470	5%	1/4W	
R1790	1-216-451-11	METAL OXIDE	120	5%	2W	F
R1791	1-249-411-11	CARBON	330	5%	1/4W	
R1812	1-247-847-31	CARBON	4.7K	5%	1/4W	
R1851	1-249-393-11	CARBON	10	5%	1/4W	

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REF. NO.	PART NO.	DESCRIPTION	REMARK
		MISCELLANEOUS	
		**********	
⚠	1-409-942-11	COIL, DEMAGNETIZATION	
	1-417-154-21	MATCHING TRANSFORMER, ANTENNA (KV-J21MF3 ONLY)	
	1-452-032-00	MAGNET,DISC	
	1-452-277-00	MAGNET, BMC	
	1-452-509-51	NECK ASSY, CRT (NA308) (EXCEPT FOR KV-J21PF1)	
	1-501-730-41	ANTENNA, TELESCOPIC (KV-J21MF3 ONLY)	
	1-503-902-11	SPEAKER	
	1-505-892-11	SPEAKER (10CM) (KV-J21MF1AK/J21MN1AK ONLY)	
⚠	1-574-062-61	CORD, POWER (WITH CONNECTOR) 2.5A/250V	
⚠	1-900-700-05	LEAD ASSY, FOCUS	
	8-451-280-33	DEFLECTION YOKE (Y21PXA2)	
⚠	8-738-774-05	PICTURE TUBE (A51JUH71X)	

****

		ACCESSORIES AND PACKING MATERIALS
		**********
	1-417-154-21	MATCHING TRANSFORMER, ANTENNA (KV-J21MF3 ONLY)
	1-501-730-41	ANTENNA, TELESCOPIC (KV-J21MF3 ONLY)
	3-701-910-01	SCREW, SPECIAL (DIA. 3.8X20)
	3-862-021-11	MANUAL, INSTRUCTION (EXCEPT FOR KV-J21MF3)
	3-862-021-21	MANUAL, INSTRUCTION (KV-J21MF3)
*	4-053-003-01	BAG, PROTECTION
*	4-064-273-01	CUSHION (LOWER)(ASSY) (KV-J21MF1AK/J21MN1AK)
*	4-059-261-01	CUSHION (LOWER)(ASSY) (KV-J21MF3/J21PF1)
*	4-064-274-01	CUSHION (UPPER)(ASSY) (KV-J21MF1AK/J21MN1AK)
*	4-059-262-01	CUSHION (UPPER)(ASSY) (KV-J21MF3/J21PF1)
*	4-064-279-01	INDIVIDUAL CARTON (KV-J21MF1AK/J21MN1AK)
*	4-056-172-01	INDIVIDUAL CARTON (KV-J21MF3)
*	4-059-267-01	INDIVIDUAL CARTON (KV-J21PF1)
	4-392-003-31	BAND, HOLD
	4-392-004-21	CLIP

****

		REMOTE COMMANDER
		**********
	1-475-800-11	REMOTE COMMANDER (RM-883)

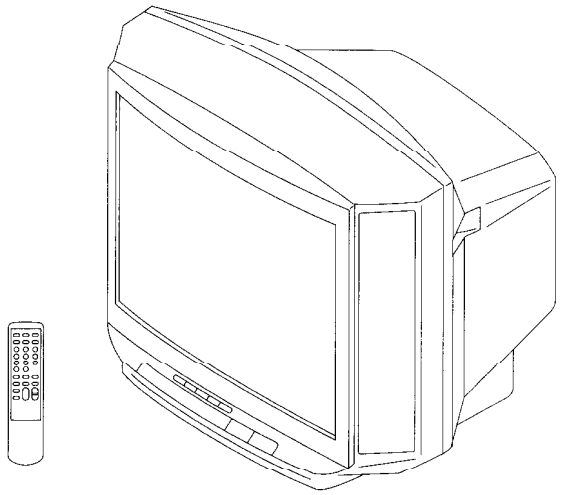
Sony Corporation
Display Company
TV Display Business Asia

English
98DM70035-1
Printed in Malaysia
© 1998. 4

SERVICE MANUAL BG-1S (D) CHASSIS

MODEL	COMMANDER	DEST.	CHASSIS NO.
KV-J21MF1	RM-870	India	SCC-K67B-A
KV-J21MF5	RM-870	Vietnam	SCC-K26F-A
KV-J21MN1	RM-870	India	SCC-K67C-A

MODEL	COMMANDER	DEST.	CHASSIS NO.



MICROFILM

TRINITRON® COLOR TV

SONY®

SPECIFICATIONS

		Note
Power requirements	110-240 V AC, 50/60 Hz	
Power consumption (W)	Indicated on the rear of the TV	
Television system	B/G, I, D/K, M	
Color system	PAL, PAL 60, SECAM, NTSC4.43, NTSC3.58	
Stereo system	NICAM Stereo B/G, I; A2 Stereo (German) B/G	KV-J21MN1 only
Channel coverage		
B/G	VHF: E2 to E12/UHF: E21 to E69/CATV: S01 to S03, S1 to S41	
I	UHF: B21 to B68/CATV: S01 to S03, S1 to S41	
D/K	VHF: C1 to C12, R1 to R12/UHF: C13 to C57, R21 to R60/ CATV: S01 to S03, S1 to S41, Z1 to Z39	
M	VHF: A2 to A13/UHF: A14 to A79/ CATV: A-8 to A-2, A to W+ 4, W+ 6 to W+ 84	
Audio output (speaker)	3W × 2	
Inputs	Antenna: 75 ohms	
	VIDEO IN jacks: phono jacks Video: 1 Vp-p, 75 ohms Audio: 500 mVrms, high impedance	
Outputs	Headphone jack: mini jack	
	MONITOR OUT jacks: phono jacks Video: 1 Vp-p, 75 ohms Audio: 500 mVrms	
Picture tube	21 in.	
Tube size (cm)	54	Measured diagonally
Screen size (cm)	51	Measured diagonally
Dimensions (w/h/d, mm)	610 × 470 × 473	
Mass (kg)	22	

Design and specifications are subject to change without notice.

CAUTION

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE ANODE.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

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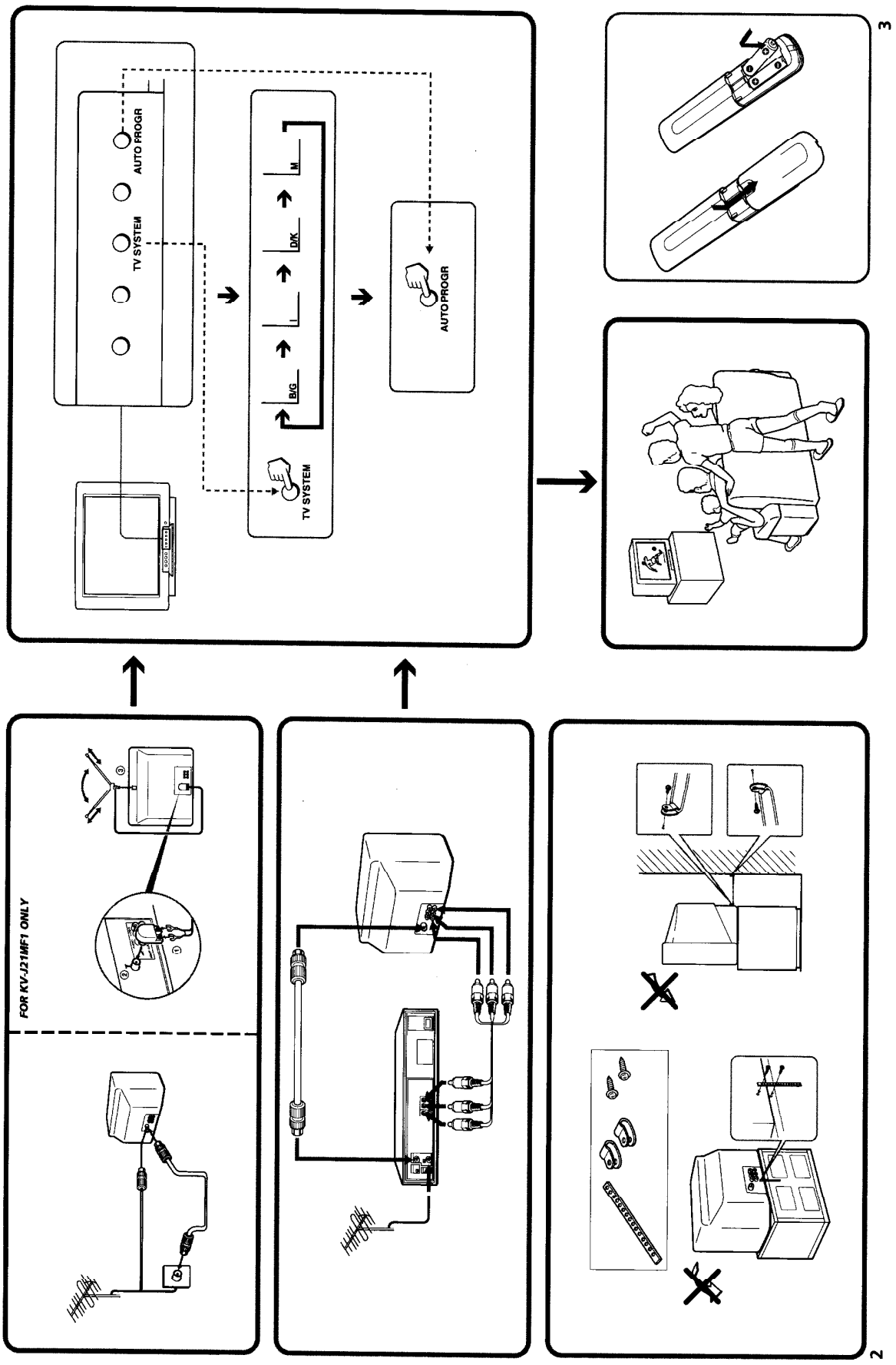
SECTION 1
GENERAL

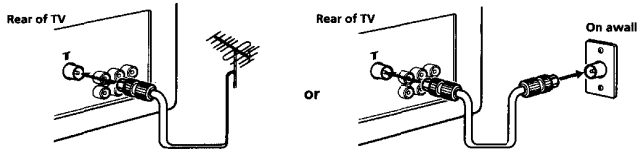
The operating instructions mentioned here are partial abstracts from the Operating Instructions Manual. The page numbers of the Operating Instruction Manual remain as in this manual.



Connections

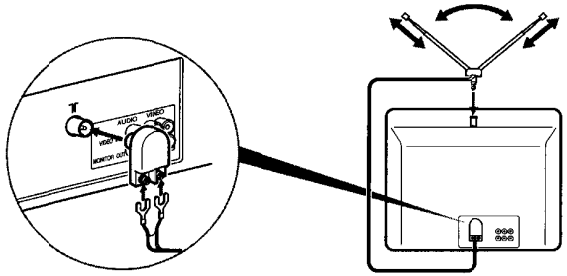
Connecting a VHF antenna or a combination VHF/UHF antenna — 75-ohm coaxial cable (round)

Attach an optional IEC antenna connector to the 75-ohm coaxial cable.
Plug the connector into the 𝕋 (antenna) socket at the rear of the TV.



Connecting an indoor antenna

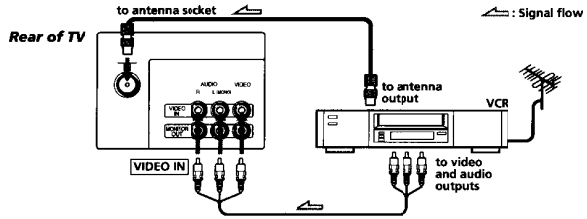
FOR KV-J21MF1 ONLY



Connecting optional equipment

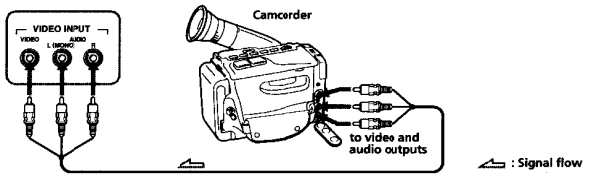
You can connect optional audio/video equipment to your TV such as a VCR, multi disc player, camcorder, video game or stereo system.

Connecting video equipment using video input jacks



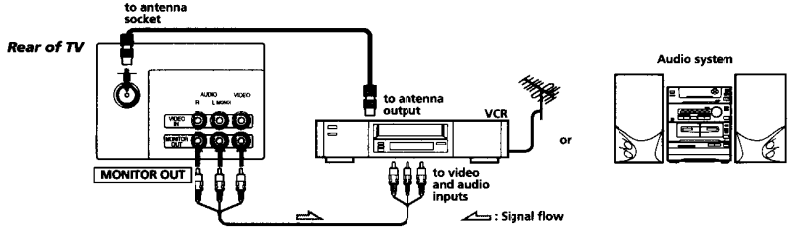
When connecting a monaural VCR
Connect the yellow plug to VIDEO and the black plug to AUDIO-L (MONO).

Front of TV



When using the video input jacks
Do not connect video equipment to the video input jacks at the front and the rear of your TV simultaneously; otherwise the picture will not be displayed properly on the screen.

Connecting audio/video equipment using MONITOR OUT jacks



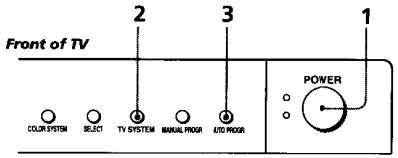
When recording through the MONITOR OUT jacks
If you change the channel or video input while recording with a VCR, the channel or video input you are recording also will be changed.

KV-J21MF1/J21MF5/J21MN1
RM-970

Presetting channels

Presetting channels automatically

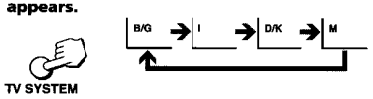
You can preset up to 80 TV channels in numerical sequence from program position 1.



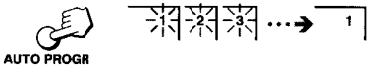
1 Press POWER.

When the TV is in standby mode after pressing POWER, press POWER on the remote commander.

2 Press TV SYSTEM until your local TV system appears.



3 Press AUTO PROGR.



To start presetting channels automatically from the specified program position

1 Press MANUAL PROGR.
2 Press TV SYSTEM to select your local TV system.
3 Press PROGR +/– to select the program position.
4 Press AUTO PROGR.

Presetting channels manually

To change the channel for a particular program position or to receive a channel with a weak signal, preset the channel manually.

1 Press MANUAL PROGR.

2 Press PROGR +/– until the required program position appears on the screen.

3 Press TV SYSTEM until your local TV system appears.

4 Press VOLUME +/– on the TV until the required channel picture appears on the screen.

5 Press MANUAL PROGR.

If the TV system is not properly selected
The color of the picture may be poor and/or the sound may be noisy. In this case, select the appropriate TV system.

1 Press PROGR +/– to select the program position.
2 Press TV SYSTEM until the picture and sound become normal.

Notes
- If you do not know your local TV system, consult your nearest authorized service center or dealer.
- The setting of the TV SYSTEM is memorized for each program position.

Disabling program positions

By disabling unused or unwanted program positions, you can skip those positions when you press PROGR +/–.

1 Press PROGR +/– until the unused or unwanted program position appears on the screen.

2 Press MANUAL PROGR.

3 Press PIC MODE on the remote commander.

4 Press MANUAL PROGR.

To cancel the skip setting
Preset the channel manually or automatically again.

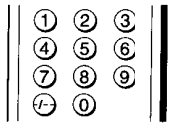
Watching the TV

1 Press POWER to turn the TV on.

When the TV is in standby mode after pressing POWER, press POWER on the remote commander.

2 Select the TV channel you want to watch.

To select a channel directly
Press a number button.



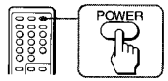
To select a two-digit channel, press "-/--" before the number buttons.
For example: to select channel 25, press "-/--," and then "2" and "5."

To scan through channels
Press PROGR +/– until the channel you want appears.

3 Press VOL +/– to adjust the volume.

Switching off the TV

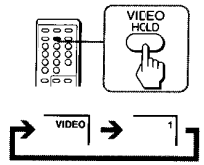
To switch off the TV temporarily, press POWER on the remote commander.



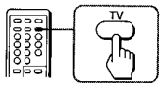
To switch off the TV completely, press POWER on the TV.
If the power on the TV is turned off in standby mode, the STANDBY indicator may remain alight for a while.

Watching the video input

Press VIDEO/HOLD.

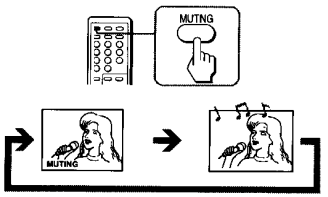


To watch TV, press TV.



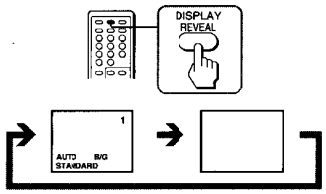
Muting the sound

Press MUTING.



Displaying on-screen information

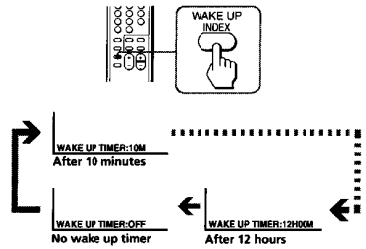
Press DISPLAY/REVEAL.
The program position, local system, and TV settings are displayed on the screen.



Setting the Wake Up Timer

You can set the TV to turn on automatically after the period of time you want.

1 Press WAKE UP/INDEX repeatedly to set the timer.
The on-screen display appears and the WAKE UP/STEREO indicator lights up.



2 If you want a particular TV program or video input to be displayed using the Wake Up Timer, select the TV program or video mode.

3 Press POWER on the remote commander or set the Sleep Timer to turn off the TV in standby mode.

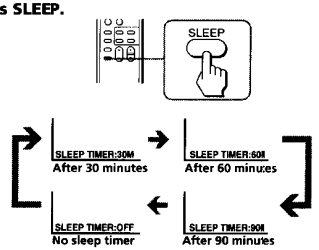
To cancel the Wake Up Timer, press WAKE UP/INDEX repeatedly until "WAKE UP TIMER: OFF" appears, or turn off the main power of the TV.

Notes
- The Wake Up Timer starts immediately after the on-screen display disappears.
- The last TV program position or video mode just before the TV turns into standby mode will appear when the TV is turned on using the Wake Up Timer.
- If no buttons or controls are pressed for more than two hours after the TV is turned on using the Wake Up Timer, the TV automatically turns into standby mode. When you want to continue watching the TV, press any button or control on the TV or remote commander.

Setting the Sleep Timer

You can set the TV to turn off automatically after the period of time you want.

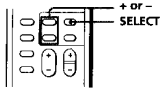
Press SLEEP.



To cancel the Sleep Timer, press SLEEP repeatedly until "SLEEP TIMER: OFF" appears, or turn the TV off.

Changing the on-screen display language

If you prefer Chinese to English, you can change the on-screen display language. You can use buttons on the remote commander or the TV.

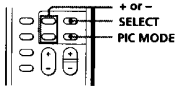


1 Press SELECT until the screen appears as follow:

2 Press + or – to select "中文".

Note
- You can also use VOLUME +/– on the TV to select the on-screen display language.

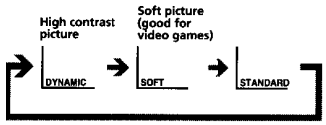
Adjusting the picture and sound



Selecting the picture mode

Press PIC MODE until the mode you want appears.

Each time you press PIC MODE, the screen changes as follows:

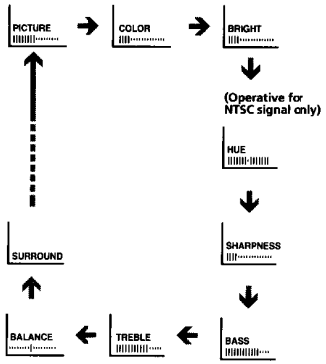


Note
- If you change the picture mode after the following adjustments, the adjustment changes in accordance with the picture mode.

Adjusting the picture and sound settings

1 Press SELECT until the item you want to adjust appears.

Each time you press SELECT, the screen changes as follows:



Note on SURROUND
- SURROUND is only applicable to a stereo signal. When receiving a monaural signal, please turn off SURROUND for the best sound.

2 Press + or – to adjust the item.

3 To adjust other items, repeat steps 1 and 2.

Note
- You can also use VOLUME +/– on the TV to adjust the picture and sound settings.

If the color of the picture is abnormal

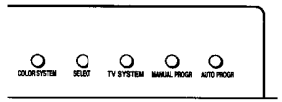
When receiving programs through the 𝕋 terminal: Press TV SYSTEM or COLOR SYSTEM or adjust the color setting until the color becomes normal.

Note
- Normally set COLOR SYSTEM to AUTO.

If the sound is distorted or noisy

When receiving programs through the 𝕋 terminal: Press TV SYSTEM until the sound becomes clear.

Front of TV

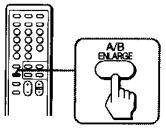


KV-J21MF1/J21MF5/J21MN1
RM-870

Selecting a stereo or bilingual program

■ ***KV-J21MN1 only***

Press A/B/ENLARGE repeatedly until you receive the sound you want.
The on-screen display changes corresponding to the selected sound and the WAKE UP/STEREO indicator also lights up.



When receiving a NICAM program

Broadcasting	On-screen display (Selected sound)
NICAM stereo	NICAM (Stereo sound) → NICAM MONO (Regular sound)
NICAM bilingual	NICAM MAIN (Main sound) → NICAM SUB (Sub sound) → NICAM MONO (Regular sound)
NICAM monaural	NICAM MAIN (Main sound) → NICAM MONO (Regular sound)

When receiving a A2 (German) program

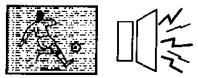
Broadcasting	On-screen display (Selected sound)
A2 (German) stereo	STEREO (Stereo sound)
A2 (German) bilingual	STEREO MAIN (Main sound) → STEREO SUB (Sub sound)

Notes
- If the signal is very weak, the sound becomes monaural automatically.
- If the stereo sound is noisy, select "regular sound." The sound becomes monaural, however, the noise will be reduced.

Troubleshooting

If you have any problems, read this manual again and check the countermeasure for each of the symptoms listed below.
If the problem persists, contact your nearest authorized service center or dealer.

Snowy picture
Noisy sound



➡Check the antenna.
➡Check the antenna connection on the TV and on the wall.
➡Check the TV SYSTEM setting.

Dotted lines or stripes

➡This may be caused by local interference (e.g. cars, neon signs, hair dryers, etc.). Adjust the antenna for minimum interference.

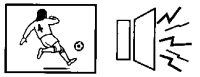
Double images or "ghosts"

➡This may be caused by reflections from nearby mountains or buildings. A highly directional antenna may improve the picture.

Note on the remote commander
- The supplied remote commander is used on several models of the TV. If you do not find instructions for some controls that are on the remote commander, that means your TV does not employ the features of those controls, eg. TEXT.

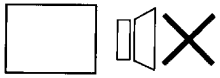
WARNING
Do not install the appliance in a confined space, such as a bookcase or built-in cabinet.

Good picture
Noisy sound



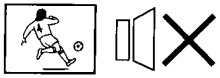
➡Check the TV SYSTEM setting.

No picture
No sound



➡Press POWER.
➡Check the antenna connection.
➡Check the VCR connections.
➡Check the power cord connection.
➡Check the standby mode.

Good picture
No sound



➡Press VOLUME +.
➡Press MUTING.
➡Press A/B/ENLARGE (KV-J21MN1 only).

No color

➡Adjust the COLOR level in the on-screen display.
➡Check the COLOR SYSTEM setting

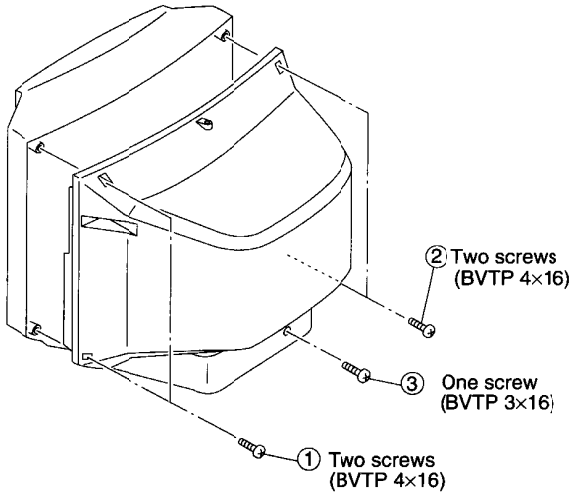
TV cabinet creaks

➡Even if the picture or the sound is normal, changes in the room temperature sometimes make the TV cabinet expand or contract, making a noise. This does not indicate a malfunction.

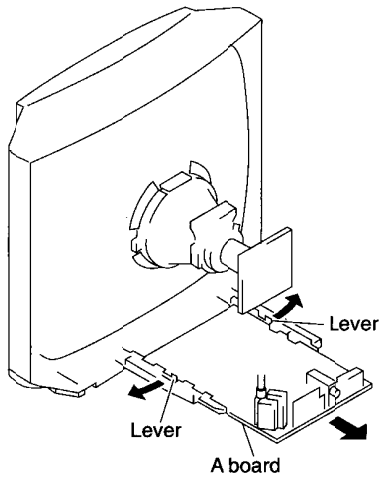
Notes
- When you switch on the TV, you may hear the "boon" sound that is caused by the demagnetization of the TV. This does not indicate a malfunction.
- The picture color may become abnormal if you change the direction of your TV. To obtain the normal picture color, press POWER on the TV to switch off the TV for five minutes and then switch it on again.
- Design and specifications are subject to change without notice.

SECTION 2
DISASSEMBLY

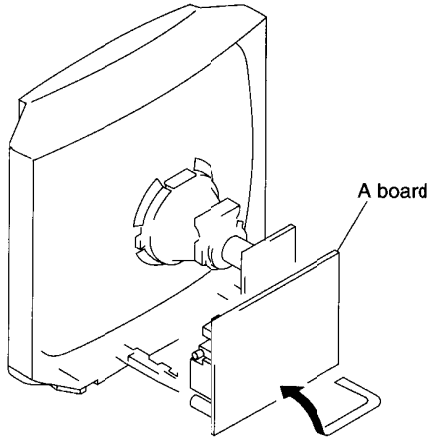
2-1. REAR COVER REMOVAL



2-2. A BOARD REMOVAL



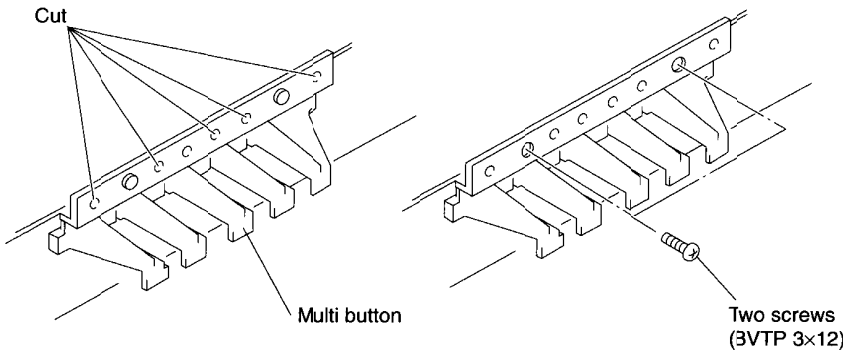
2-3. SERVICE POSITION



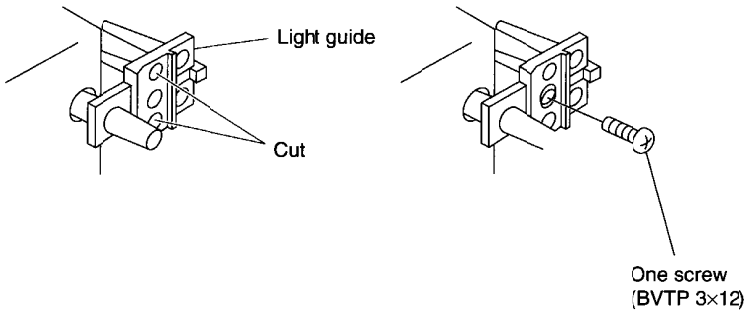
2-4. REPLACEMENT OF PARTS

For replacement of the Multi Button, Power Button and Light Guide, cut the welded portions from them, exchange with the new parts, and fix them with screws (+BVTP) respectively.

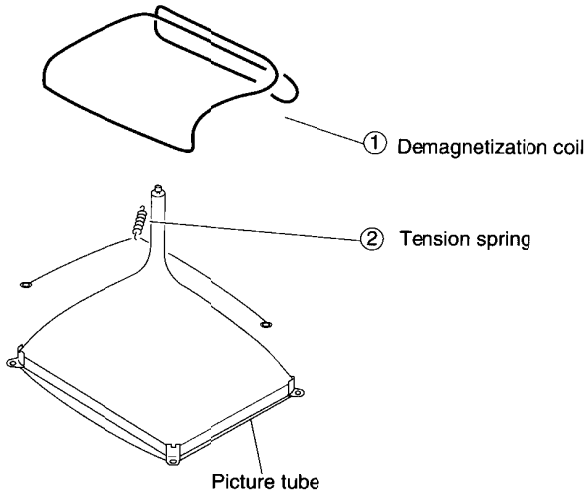
2-4-1. REPLACEMENT OF MULTI BUTTON



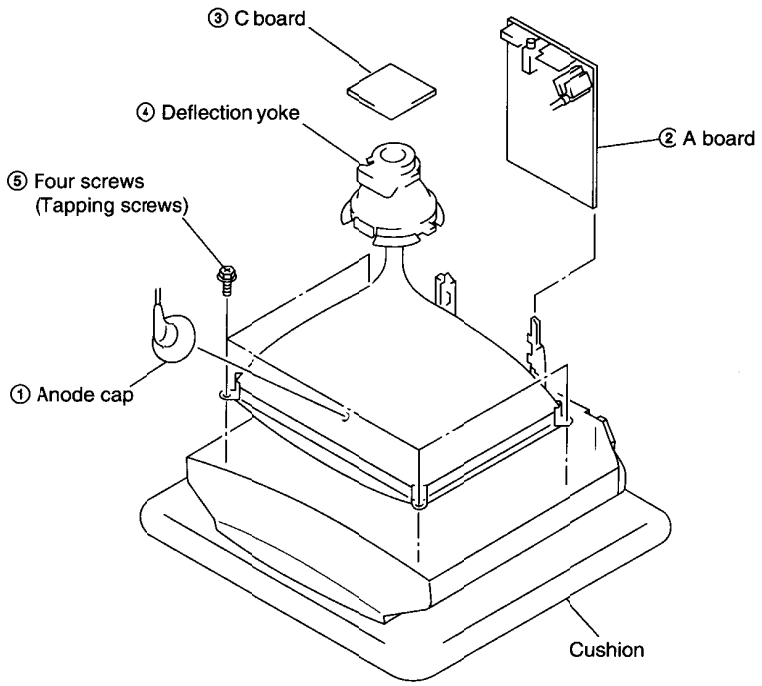
2-4-2. REPLACEMENT OF LIGHT GUIDE



2-5. DEMAGNETIZATION COIL REMOVAL



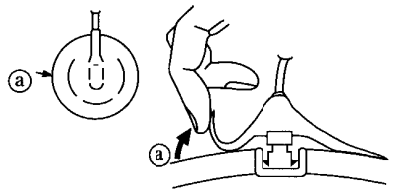
2-6. PICTURE TUBE REMOVAL



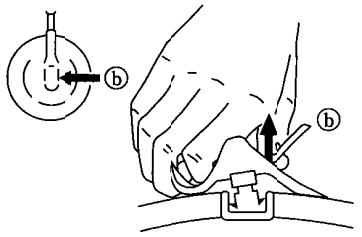
•REMOVAL OF ANODE-CAP

NOTE : After removing the anode, short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon paint on the CRT.

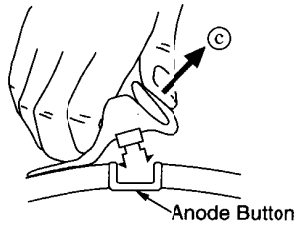
•REMOVING PROCEDURES



① Turn up one side of the rubber cap in the direction indicated by the arrow ⓐ.



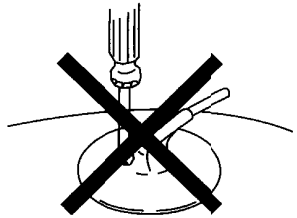
② Using a thumb press down, then pull up the rubber cap firmly in the direction indicated by the arrow ⓑ.

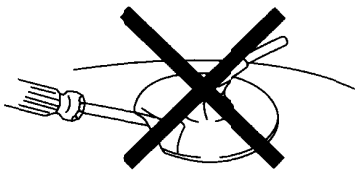


③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling it up in the direction of the arrow ⓒ.

• HOW TO HANDLE AN ANODE-CAP

① Do not hurt the surface of anode-cap with sharp shaped objects.
② Do not press the rubber too hard so as not to damage the inside of anode-cap. A metal fitting called the shatter-hook terminal is built into the rubber.
③ Do not turn the foct of rubber over too hard. The shatter-hook terminal will stick out or damage the rubber.





SECTION 3
SET-UP ADJUSTMENTS

- The following adjustments should be made when a complete realignment is required or a new picture tube is installed.
- These adjustments should be performed with rated power supply voltage unless otherwise noted.

Controls and switch should be set as follows unless otherwise noted:
PICTURE control ..... normal
BRIGHTNESS control ..... normal

Perform the adjustments in the following order:

1. Beam Landing
2. Convergence
3. Focus
4. White Balance

Note : Test Equipment Required:

1. Color-bar/Pattern Generator
2. Degausser
3. Oscilloscope

Preparation :

- In order to reduce the influence of geomagnetism on the set's picture tube, face it east or west.
- Switch on the power and degauss with the degausser.

3-1. BEAM LANDING

1. Input a white signal with the pattern generator.
   Contrast } normal
   Brightness }
2. Set the pattern generator raster signal to green.
3. Move the deflection yoke to the rear and adjust with the purity control so that the green is at the center and the blue and the red take up equally sized areas on each side.
   (See Figures 3-1 through 3-3.)
4. Move the deflection yoke forward and adjust so that entire screen is green. (See Figure 3-1.)
5. Switch the raster signal to blue, then to red and verify the condition.
6. When the position of the deflection yoke has been decided, fasten the deflection yoke with the screws.
7. If the beam does not land correctly in all the corners, use a magnet to adjust it. (See Figure 3-4.)

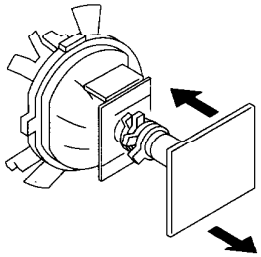


Fig. 3-1

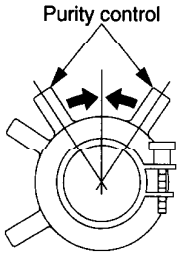


Fig. 3-2

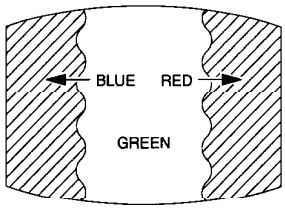


Fig. 3-3

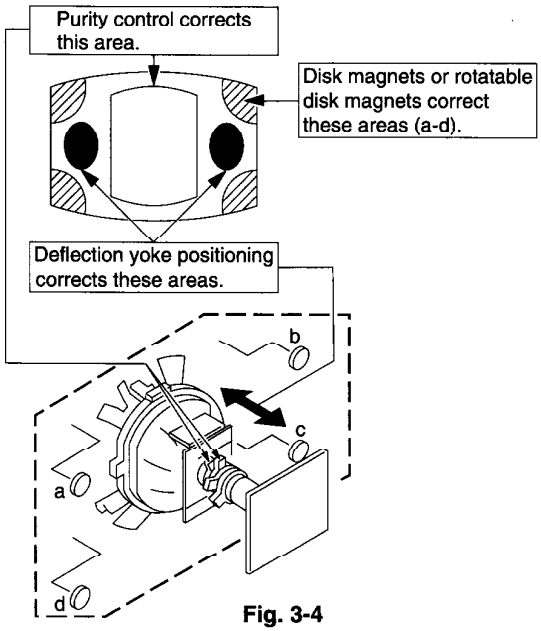


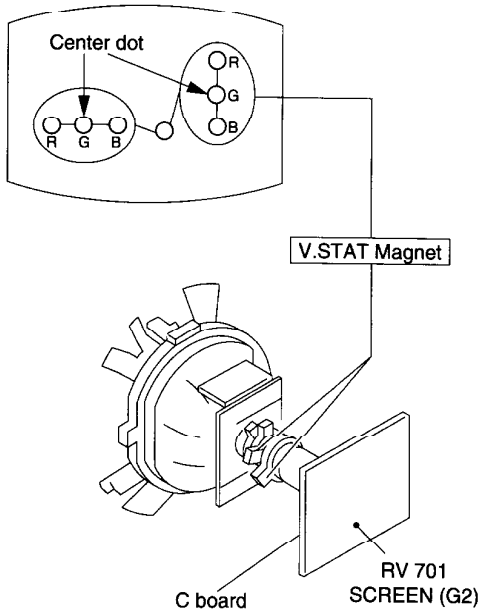
Fig. 3-4

3-2. CONVERGENCE

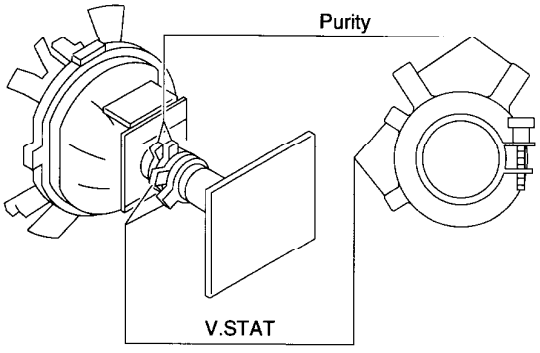
Preparation :

- Before starting this adjustment, adjust the focus, horizontal size, and vertical size.
- Minimize the brightness setting.
- Provide dot pattern.

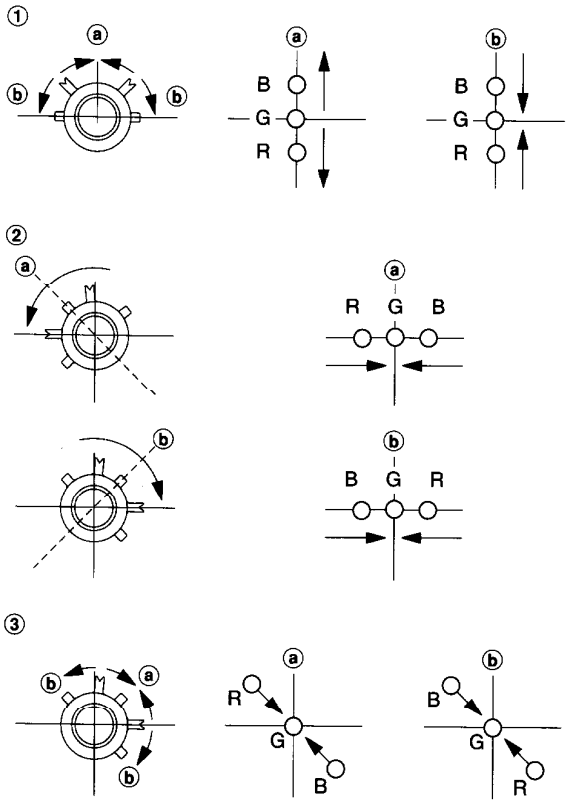
(1) Horizontal and Vertical Static Convergence



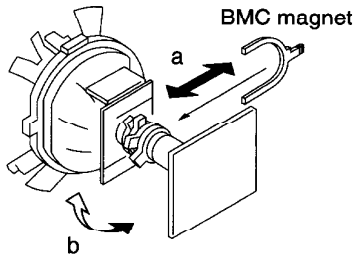
1. (Moving vertically), adjust the V.STAT magnet so that the red, green and blue dots are on top of each other at the center of the screen.
2. (Moving horizontally), adjust the H.STAT VR so that the red, green and blue dots are on top of each other at the center of the screen.



- Operation of V.STAT magnet.
  If the V.STAT magnet is moved in the direction of the ⓐ and ⓑ arrows, the red, green and blue dots move as shown below.



- Operation of BMC (Hexapole) magnet.
  If the blue or red dot does not converge with the other two dots, perform following steps.
  Move BMC magnet (a) to correct insufficient H.static convergence.
  Rotate BMC magnet (b) to correct insufficient V.static convergence.
  In either case, repeat Beam Landing Adjustment.

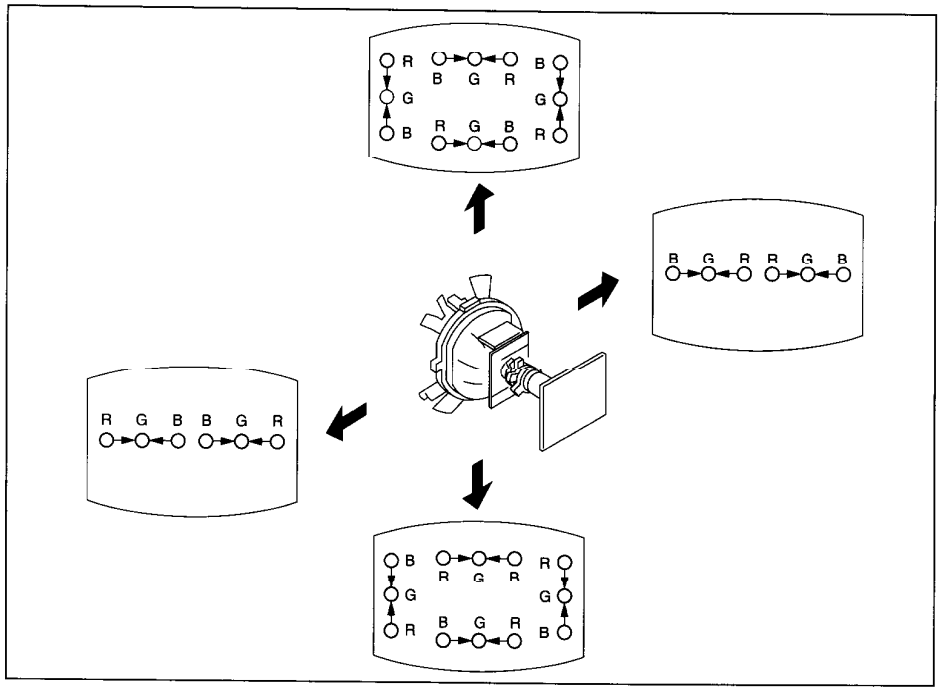


(2) Dynamic Convergence Adjustment

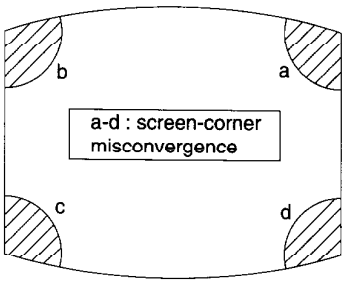
Preparation :

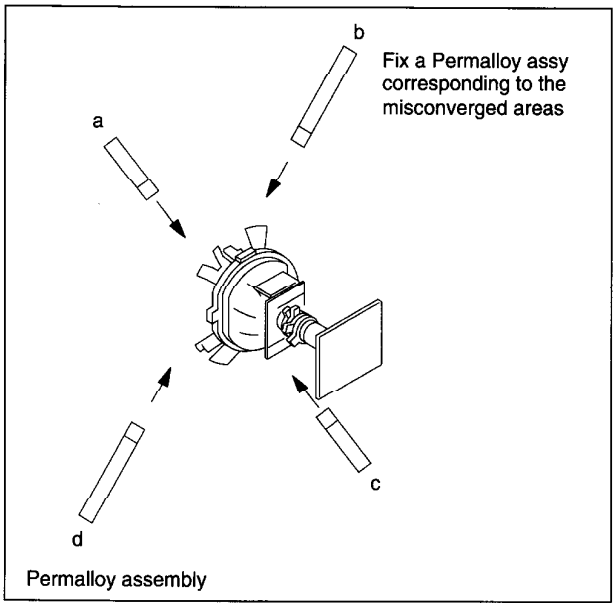
- Before starting this adjustment, adjust the horizontal static convergence and the vertical static convergence.

1. Slightly loosen the deflection yoke screws.
2. Remove the deflection yoke spacer.
3. Move the deflection yoke as shown in the figure below and optimize the convergence.
4. Tighten the deflection yoke screws.
5. Install the deflection yoke spacer.



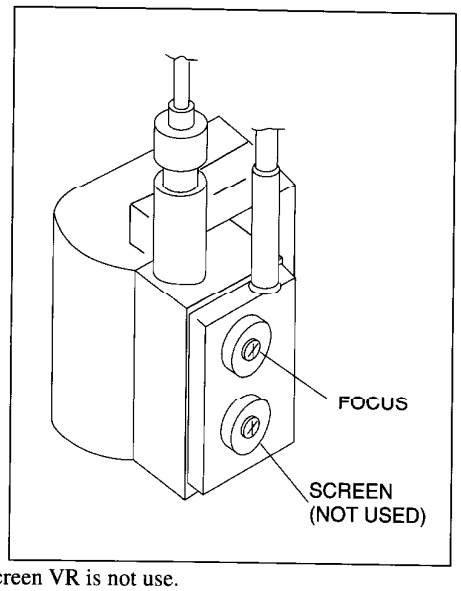
(3) Screen-corner Convergence





3-3. FOCUS ADJUSTMENT

Adjust FOCUS control on the flyback transformer for the best focus.



Note: Screen VR is not use.

a. AN ITEM OF ADJUSTMENT

Item number	Adjustment item	Initial DATA	Note
09	RDR	28	WHITE POINT R
0A	GDR	20	WHITE POINT G
0B	BDR	20	WHITE POINT B

b. METHOD OF CANCELLATION FROM SERVICE MODE

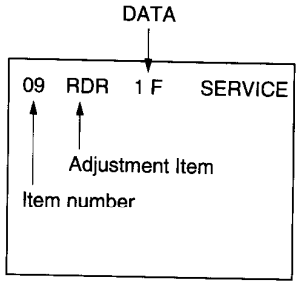
Set the standby condition (Press [POWER] button on the commander) and then press [POWER] button again, hereupon it becomes TV mode.

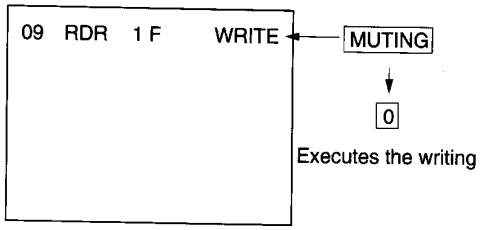
c. METHOD OF WRITE FOR MEMORY

1) Set to Service Mode.
2) Press [1] (UP) and [4] (DOWN) to select an item of adjustments.
3) Press [MUTING] button and it will indicate WRITE on screen.
4) Press [0] button to write into memory.

d. MEMORY WRITE CONFIRMATION METHOD

1) After adjustment, pull out the plug from AC outlet, and then plug into AC outlet again.
2) Turn the power switch ON and set to Service Mode.
3) Call the adjusted items again, confirm they were adjusted.

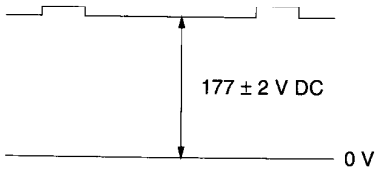




3-4. G2 (SCREEN) AND WHITE BALANCE ADJUSTMENTS

1. G2 (SCREEN) ADJUSTMENT (RV701)

1) Set the PICTURE and BRIGHTNESS to normal.
2) Put to VIDEO input mode without signals.
3) Connect R, G and B of the C board cathode to the oscilloscope.
4) Adjust G2 (RV701) volume to the value below.



2. WHITE BALANCE ADJUSTMENTS

1) Set to Service Mode.
2) Input an entire white signal.
3) Set the PICTURE to maximum.
4) Select RDR(09) with [1] and [4], and then set the level to 25 with [3] and [6].
5) Select GDR(0A) and BDR(0B) with [1] and [4] and adjust the level with [3] and [6] for the best white balance.
6) Write into the memory by pressing [MUTING], then [0].

SECTION 4
SELF DIAGNOSIS FUNCTION

If no acknowledgement is returned from a device which is turned "ON", the device has a problem.
In this case, one of the LED's responding to the problem device will flicker a defined number of times.

Flickering is operated by lighting the LED's for 60ms each time.

The flickering frequency responding to each failed device is shown below.

Device	NONVOLA-TILE MEMORY	—	Y/C JUNGLE	—	—	AUDIO PROCESSOR (TA8776N)
Flickering Frequency	1	—	3	—	—	6

All the devices are checked one after another from the left of the table.
If an error is found, the responding LED will start flickering.
So, if more than 1 device have failed, only the one on the left side will flicker.

SECTION 5
CIRCUIT ADJUSTMENTS

5-1. ADJUSTMENTS WITH COMMANDER

Service adjustments are made with the RM-870 that comes with this unit.

Entering service mode

With the unit on standby

↓

[DISPLAY]

↓

[5]

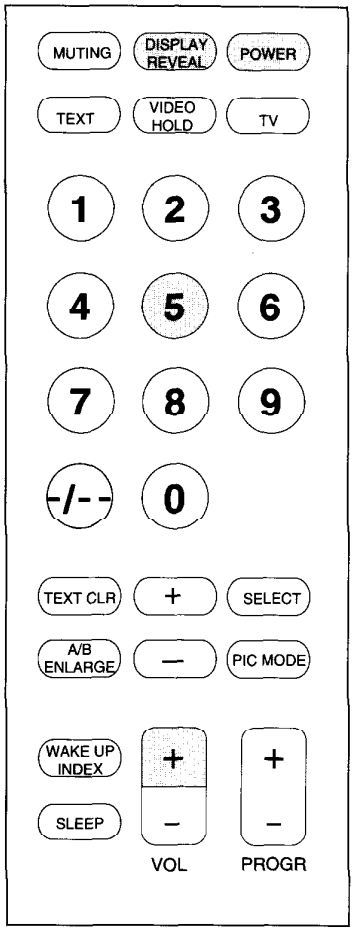
↓

[VOL (+)]

↓

[POWER]

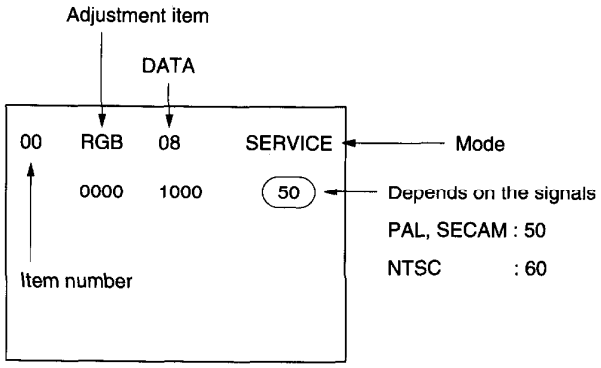
The operation sequence puts the unit into service mode.



[1], [4]	Raise/lower the service item number
[3], [6]	Raise/lower the data
[MUTING]	Writes
[0]	Executes the writing

[7], [0]	All data becomes the values in memory
[8], [0]	All user control goes to the standard state
[5], [0]	Service data initialization (Be sure not to use usually.)
[2], [0]	Write 50IIz adjustment data to 60Hz, or viceversa.

The screen display is :



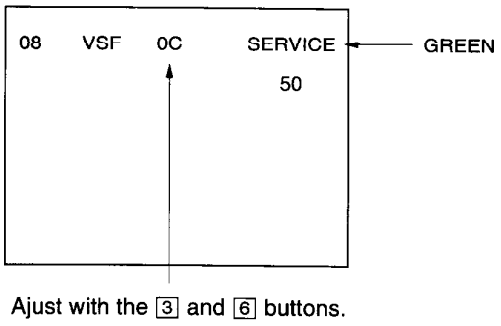
[1], [4]	Select the adjustment item.
↓	
[3], [6]	Raise/lower the data.
↓	
[MUTING]	Writes
↓	
[0]	Executes the writing.

5-2. ADJUSTMENT METHOD

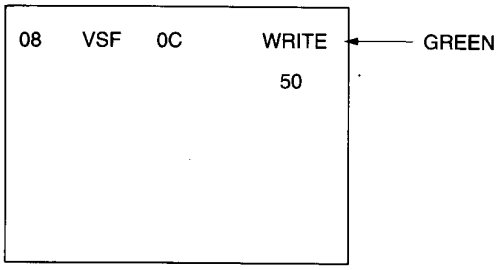
Item Number 08

This explanation uses V-SHIFT as an example.

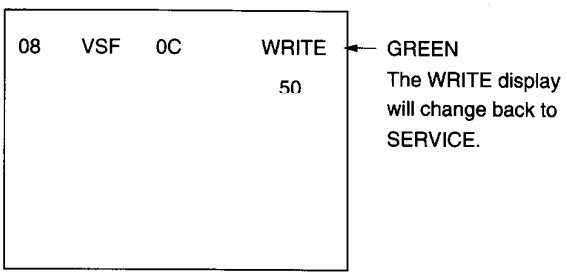
1. Select 08 V-SHIFT with the [1] and [4] buttons.
2. Raise/lower the data with the [3] and [6] buttons.
3. Select the optimum state. (The standard is 0F for PAL reception.)
4. Write with the [MUTING] button.
5. Execute the writing with the [0] button. (The WRITE display returns to green SERVICE.)



Ajust with the [3] and [6] buttons.



Written with the [MUTING].



Write executed with [0].

Use the same method for Items Number 00-49. Use [1] and [4] to select the adjustment item, use [3] and [6] to adjust, write with [MUTING], then execute the write with [0].

Adjustment Item Table (For KV-J21MF1, KV-J21MF5 only)

Item number	Adjustment Item	Data range	Initial data	Standard data		Note	Device
00	HSF	00–3F		50: 2C	60: 33	H SHIFT	TDA8375
01	HSZ	00–3F		50: 30	60: 30	H SIZE	TDA8375
02	PAP	00–3F		50: 25	60: 25	PIN AMPLITUDE	TDA8375
03	CNP	00–3F		50: 10	60: 0C	CORNER PIN	TDA8375
04	TLT	00–3F		50: 20	60: 2D	TILT	TDA8375
05	VSL	00–3F		50: 1F	60: 1F	V SLOPE	TDA8375
06	VAP	00–3F		50: 1C	60: 1B	V AMPLITUDE	TDA8375
07	SCR	00–3F		50: 16	60: 16	S CORRECTION	TDA8375
08	VSF	00–3F		50: 15	60: 15	V SHIFT	TDA8375
09	RDR	00–3F	28			WHITE POINT R	TDA8375
0A	GDR	00–3F	20			WHITE POINT G	TDA8375
0B	BDR	00–3F	20			WHITE POINT B	TDA8375
0C	FO	00–03	00	TV: 00	VIDEO: 00	PHI-1 TIME CONSTANT	TDA8375
0D	AGC	00–3F	30	TV: 30	VIDEO: 30	AGC TAKE OVER	TDA8375
0E	VSW	00–01	00	TV: 00	VIDEO: 01	VIDEO MUTE	TDA8375
0F	FOR	00–03	00			FORCED FIELD FREQ.	TDA8375
10	DL	00–01	00			INTERLACE	TDA8375
11	POC	00–01	00			POC FIX	TDA8375
12	VID	00–01	00	50: 00	60: 00	VIDEO IDENT MODE	TDA8375
13	HCO	00–01	00	50: 00	60: 00	EHT TRACKING MODE	TDA8375
14	EVG	00–01	00	50: 00	60: 00	ENABLE V GUARD	TDA8375
15	SBL	00–01	00	50: 00	60: 00	SERVICE BLANKING	TDA8375
16	PRD	00–01	00	50: 00	60: 00	OVER-VOLTAGE INPUT	TDA8375
17	COR	00–01	00	TV: 00	VIDEO: 00	NOISE CORING PEAK	TDA8375
18	PMX	00–3F	2B			PICTURE MAX DATA	TDA8375
19	PMI	00–3F	04			PICTURE MIN DATA	TDA8375
1A	SBR	00–7F	4B			SUB-BRIGHTNESS	TDA8375
1B	SHU	00–0F	07			SUB-HUE	TDA8375
1C	SSH	00–03	01	TV: 01	VIDEO: 02	SUB-SHARPNESS	TDA8375
1D	SC1	00–3F		50: 26	60: 29	SUB-COLOR LOWER	TDA8375
1E	SC2	00–3F		50: 0C	60: 0D	SUB-COLOR HIGHER	TDA8375
1F	AIP	00–7F	3F			ADJUSTMENT IF-PLL	TDA8375
20	VEW	00–3F	19			VERTICAL ZOOM	TDA8375
21	TXP	00–0F	07			Text Picture cont.	SAA5281
22	MXP	00–0F	0A			Text Mix mode Pic.	SAA5281
23	BKP	00–3F	00			Blk Off Picture	CXP85200
24	ODL	00–FF	10			Power ON Delay	CXP85200
25	OFR	00–0F	00			Remo. con. RGB OUT	CXP85200
26	OFM	00–0F	00			Main power RGB OUT	CXP85200
27	OSH	00–3F	0A			OSD Position H	CXP85200
28	MUT	00–01	00			No Sync. Mute	CXP85200
29	ABL	00–01	00			Bright ABL	CXP85200
2A	DTV	00–01	00			Disable TV Key	CXP85200
2B	SCM	00–01	00			SECAM trap active	CXP85200
2C	OP0	00–FF	40			Option 0	CXP85200
2D	OP1	00–FF	07			Option 1	CXP85200

※ 50 ··· 50Hz data, 60 ··· 60Hz data
※ Standard data listed on the Adjustment Item Table are reference values, therefore differ per model.

Adjustment Item Table (For KV-J21MN1 only)

Item number	Adjustment Item	Data range	Initial data	Standard data			Note	Device
00	HSF	00–3F		50: 2C	60: 33		H SHIFT	TDA8375
01	HSZ	00–3F		50: 30	60: 30		H SIZE	TDA8375
02	PAP	00–3F		50: 25	60: 25		PIN AMPLITUDE	TDA8375
03	CNP	00–3F		50: 10	60: 0C		CORNER PIN	TDA8375
04	TLT	00–3F		50: 20	60: 2D		TILT	TDA8375
05	VSL	00–3F		50: 1F	60: 1F		V SLOPE	TDA8375
06	VAP	00–3F		50: 1C	60: 1B		V AMPLITUDE	TDA8375
07	SCR	00 3F		50: 16	60: 16		S CORRECTION	TDA8375
08	VSF	00–3F		50: 15	60: 15		V SHIFT	TDA8375
09	RDR	00–3F	28				WHITE POINT R	TDA8375
0A	GDR	00–3F	20				WHITE POINT G	TDA8375
0B	BDR	00–3F	20				WHITE POINT B	TDA8375
0C	FO	00–03	00	TV: 00	VIDEO: 00	TEXT: 01	PHI-1 TIME CONSTANT	TDA8375
0D	AGC	00–3F	30	TV: 30	VIDEO: 30	TEXT: 30	AGC TAKE OVER	TDA8375
0E	VSW	00–01	00	TV: 00	VIDEO: 01	TEXT: 00	VIDEO MUTE	TDA8375
0F	FOR	00–03	03				FORCED FIELD FREQ.	TDA8375
10	DL	00–01	00				INTERLACE	TDA8375
11	POC	00–01	00				SYNCHRO MODE FIX	TDA8375
12	VID	00–01	00				VIDEO IDENT MODE	TDA8375
13	HCO	00–01	00				EHT TRACKING MODE	TDA8375
14	EVG	00–01	00				ENABLE V GUARD	TDA8375
15	SBI	00–01	00				SERVICE BLANKING	TDA8375
16	PRD	00–01	00				OVER-VOLTAGE INPUT	TDA8375
17	COR	00–01	00				NOISE CORING PEAK	TDA8375
18	PMX	00–3F		Except Normal:	Normal: 2B		PICTURE MAX DATA	TDA8375
19	PMI	00–3F		Except Normal:	Normal: 04		PICTURE MIN DATA	TDA8375
1A	SBR	00–7F	4B	Except Normal:	Normal:		SUB-BRIGHTNESS	TDA8375
1B	SHU	00–0F	07				SUB-HUE	TDA8375
1C	SSH	00–03	01	TV: 01	VIDEO: 02		SUB-SHARPNESS	TDA8375
1D	SC1	00–3F	1F	50: 26	60: 29		SUB-COLOR LOWER	TDA8375
1E	SC2	00–3F	0B	50: 0C	60: 0D		SUB-COLOR HIGHER	TDA8375
1F	AIP	00–7F	3F				ADJUSTMENT IP PLL	TDA8375
20	VZW	00–3F	19				VERTICAL ZOOM	TDA8375
21	FAW	00–FF	08				NICAM FAW Thresh	MSP3410
22	CTM	00–FF	08				NICAM Error Bit (MONO)	MSP3410
23	CTN	00–FF	50				NICAM Error Bit (NICAM)	MSP3410
24	WCD	00–FF	0A				W. G. Change Data	MSP3410
25	WST	00–FF	15				W. G. Stereo Cut Point	MSP3410
26	WTM	00–FF	50				W. G. Timer Change	MSP3410
27	WBT	00–FF	EA				W. G. BILINGUAL	MSP3410
28	ACG	00–01	01				AGC AUTO/CONST.	MSP3410
29	CDB	00–3F	28				AGC GAIN CONST.	MSP3410
2A	FGP	00–7F	24				FM (BG, I, DK) Prescale	MSP3410
2B	FMP	00–7F	40				FM (M) Prescale	MSP3410
2C	WGP	00–7F	3C				W. G. Prescale	MSP3410
2D	NIP	00–7F	7F				NICAM Plescale	MSP3410
2E	CRM	00–01	00				Carrior Mute	MSP3410
2F	CMI	00–03	00				Carrior Mute Level	MSP3410
30	ACO	00–01	01				Audio Clock Out	MSP3410
31	WAC	00–0F	01				W. G. Agreement count	MSP3410
32	DLY	00–FF	30				Stereo Search Dly	MSP3410
33	DLG	00–FF	10				W/G Search Delay	MSP3410
34	TXP	00–0F	07				Text Picture Cont.	SAA5281
35	MXP	00–0F	0A				Text Mix mode Pic.	SAA5281

For KV-J21MN1 only

Item number	Adjustment Item	Data range	Initial data	Standard data	Note	Device
36	BKP	00–3F	00		Blk Off Picture	CXP85200
37	HBL	00–3F	25		H Blk Left Width	CXP85200
38	HBR	00–3F	20		H Blk Right Width	CXP85200
39	VBH	00–7F	00		V Blk Hight Width	CXP85200
3A	VBL	00–FF	FF		V Blk Low Width	CXP85200
3B	ODL	00–FF	10		Power ON Delay	CXP85200
3C	OFR	00–0F	00		Remo. con. RGB OUT	CXP85200
3D	OFM	00–0F	00		Main power RGB OUT	CXP85200
3E	OSH	00–3F	0A		OSD Position H	CXP85200
3F	DKS	00–01	00		D/K STEREO Search	CXP85200
40	MUT	00–01	01		No Sync. Mute	CXP85200
41	DWZ	00–01	00		Disable Widezoom	CXP85200
42	ABL	00–01	00		Bright ABL	CXP85200
43	DTV	00–01	00		Disable TV SYS Key	CXP85200
44	SCM	00–01	00		SECAM Trap Active	CXP85200
45	ROC	00–0F	07		Rotation Center	CXP85200
46	ROS	00–07	03		Rotation Step Wid	CXP85200
47	DVM	00–01	00		Disable VM mode	CXP85200
48	OP0	00–FF	40		Option 0	CXP85200
49	OP1	00–FF	07		Option 1	CXP85200

※ 50 ··· 50Hz data, 60 ··· 60Hz data
※ Standard data listed on the Adjustment Item Table are reference values, therefore differ per model.

No. 2C, 48 OP0 * Input data are different according to models

Item	–	AV Input		–	–	–	–	Saudi
KV-J21MF1	0	1	0	0	0	0	0	0
KV-J21MF5	0	1	0	0	0	0	0	0
KV-J21MN1	0	1	0	0	0	0	0	0

No. 2D, 49 OP1

Item	–	–	–	TV System		NTSC	SECAM	Chin
KV-J21MF1	0	0	0	0	0	1	1	1
KV-J21MF5	0	0	0	0	0	1	1	1
KV-J21MN1	0	0	0	0	0	1	1	1

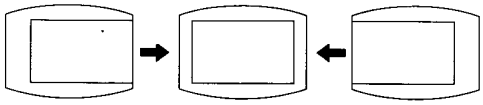
5-3. A BOARD ADJUSTMENT AFTER IC003 (MEMORY) REPLACEMENT

1. Enter to Service Mode.
2. Press commander buttons [5] and [0] (Data Initialize), and [2] and [0] (Data Copy) to initialize the data.
3. Call each item number, and check if the respective screen shows the normal picture.
   In case some items are not well-adjusted, give them fine adjustment.
   Write the data per each item number ([MUTING] + [0]).
4. Select item numbers "2C or 48" (OP0) and "2D or 49" (OP1) and respectively set the bit per model with command buttons [3] and [6].
5. Press commander buttons [8] and [0] (Test Normal) to return to the data that was set on the shipment from the factory.
   (= Cancel Service Mode.)

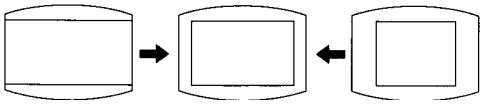
5-4. PICTURE DISTORTION ADJUSTMENT

Item Number 00 – 08

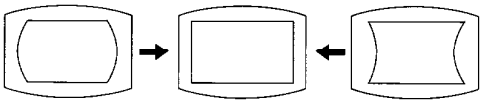
00 HSF (H SHIFT)



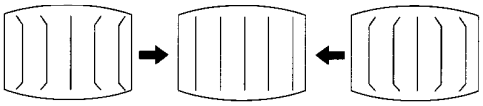
01 HSZ (H SIZE)



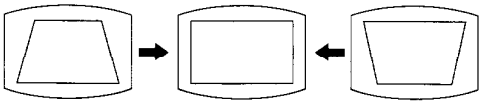
02 PAP (PIN AMPLITUDE)



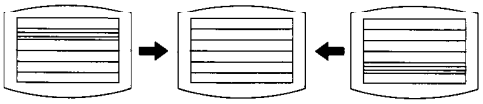
03 CNP (CORNER PIN)



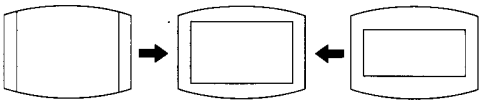
04 TLT (TILT)



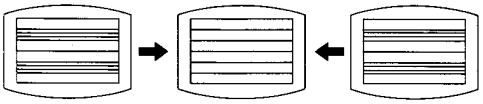
05 VSL (V SLOPE)



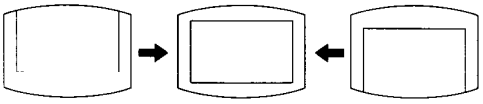
06 VAP (V AMPLITUDE)



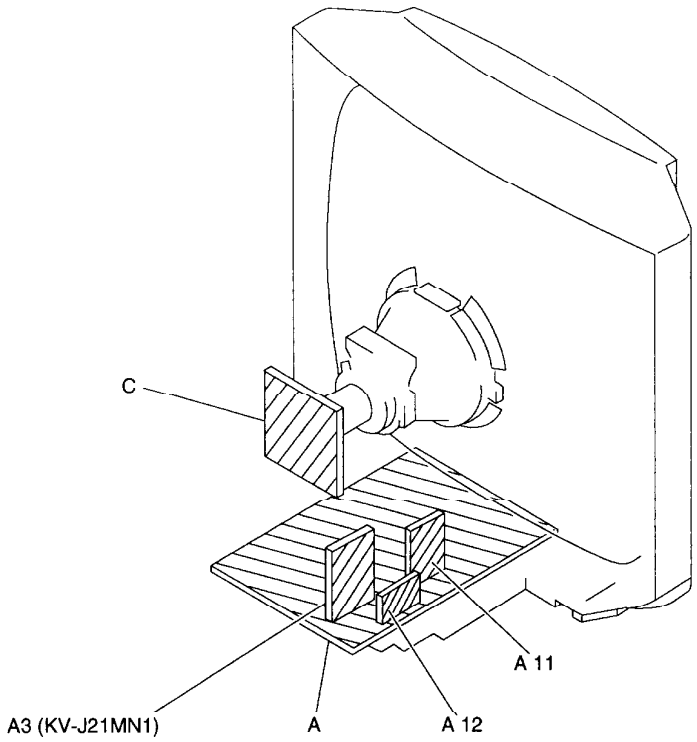
07 SCR (S CORRECTION)



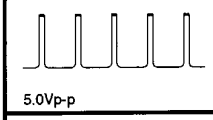
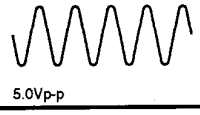
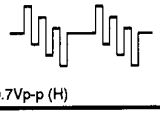
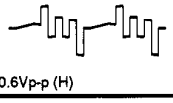
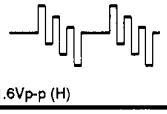
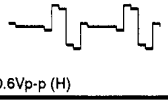
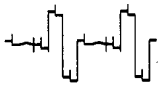
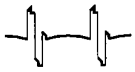
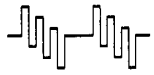
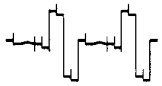
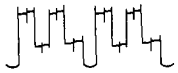
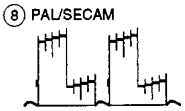
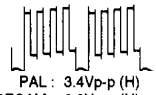
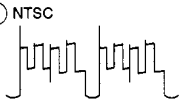
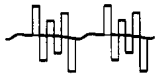
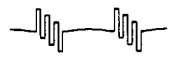
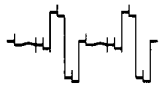
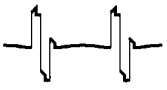
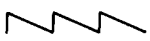
08 VSF (V SHIFT)



6-2. CIRCUIT BOARDS LOCATION

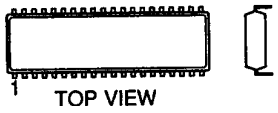


A BOARD WAVEFORMS

①  5.0Vp-p	②  5.0Vp-p	③ PAL  0.7Vp-p (H)	③ NTSC  0.6Vp-p (H)	③ SECAM  1.6Vp-p (H)	④ PAL  0.6Vp-p (H)
④ NTSC  0.6Vp-p (H)	④ SECAM  1.2Vp-p (H)	⑤ PAL/SECAM  PAL : 1.3Vp-p (H) SECAM : 1.5Vp-p (H)	⑤ NTSC 1.4Vp-p (H)	⑥ PAL/SECAM PAL : 1.0Vp-p (H) SECAM : 1.2Vp-p (H)	⑥ NTSC  1.0Vp-p (H)
⑦ PAL/SECAM 5.0Vp-p (H)	⑦ NTSC  4.0Vp-p (H)	⑧ PAL/SECAM  3.3Vp-p (H)	⑧ NTSC 4.0Vp-p	⑨ PAL/SECAM  PAL : 3.4Vp-p (H) SECAM : 3.0Vp-p (H)	⑨ NTSC  4.0Vp-p (H)
⑩ PAL 2.2Vp-p (H)	⑩ NTSC 3.0Vp-p (H)	⑩ SECAM 2.2Vp-p (H)	⑪ PAL 1.0Vp-p (H)	⑪ NTSC 1.3Vp-p (H)	⑪ SECAM 1.0Vp-p (H)
⑫ PAL 0.7Vp-p (H)	⑫ NTSC  0.7Vp-p (H)	⑫ SECAM  1.5Vp-p (H)	⑬ PAL 0.7Vp-p (H)	⑬ NTSC  0.5Vp-p (H)	⑬ SECAM  1.2Vp-p (H)
⑭ 149Vp-p	⑮ 1030Vp-p	⑯  1.5Vp-p (V)			

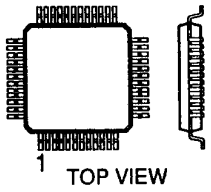
6-4. SEMICONDUCTORS

CXA1110BS (30PIN)
CXP85224A-037S (64PIN)
SN74LS32NS (14PIN)
ST24C04CB1 (8PIN)
TDA4665T-T (16PIN)
TDA8375A (56PIN)
TDA8395T (20PIN)
TDA8424 (20PIN)
µPC4558C (8PIN)



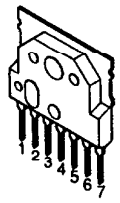
Dual In-line Package
Pin 6 ~ 98

CXP85116B-651S (64PIN)
MSP3410B-PP-F7 (44PIN)



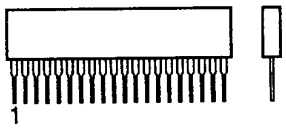
Quad Flat L-leaded Package
Pin 20 ~ 996

LA7830



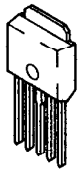
LA7910 (9PIN)

MARKING SIDE VIEW

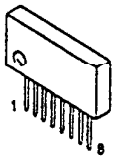


Single In-line Package
Pin 6 ~ 99

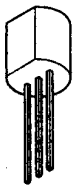
L78LR05D-MA



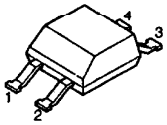
NJM2234L (8PIN)



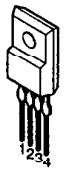
NJM78L12A



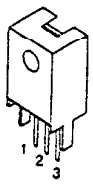
PC123F2



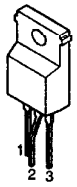
PQ09RE11



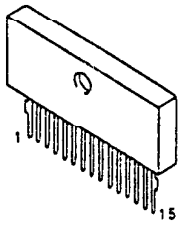
SBX1981-11



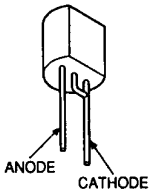
SE115N
SE-135N



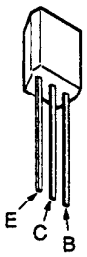
TA7805S
TA8248K



µPC574J



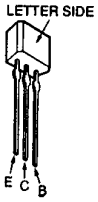
DTC114ES
DTC143ES
DTC144ES
2SC2669-O



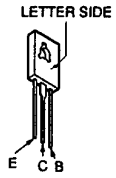
2SA1091-O

2SA1162-G
2SC2712-YG

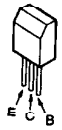
2SA1175-HFE
2SC2410SN
2SC2785-HFE



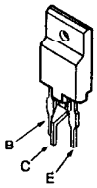
2SC2611



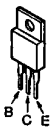
2SC3209LK



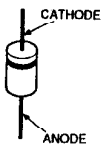
2SD1878-CA



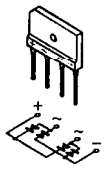
2SD2012



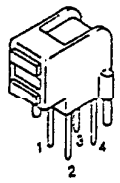
D1NL20
EL-1Z
ERC06-15S
ERD29-08J
GP08D
RGP02-17EL-6433
RU4DS
S3L20UF4



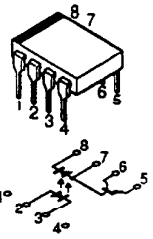
D4SB60L



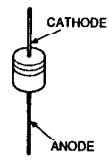
LNK0220022G



MC932



RD2.2ES-B2
RD4.7ESB2
RD5.1ES-B1
RD5.6ESB2
RD8.2ES-B2
RD9.1ES-L
1SS119-25



KV-J21MF1/J21MF5/J21MN1
RM-870

SECTION 7
EXPLODED VIEW

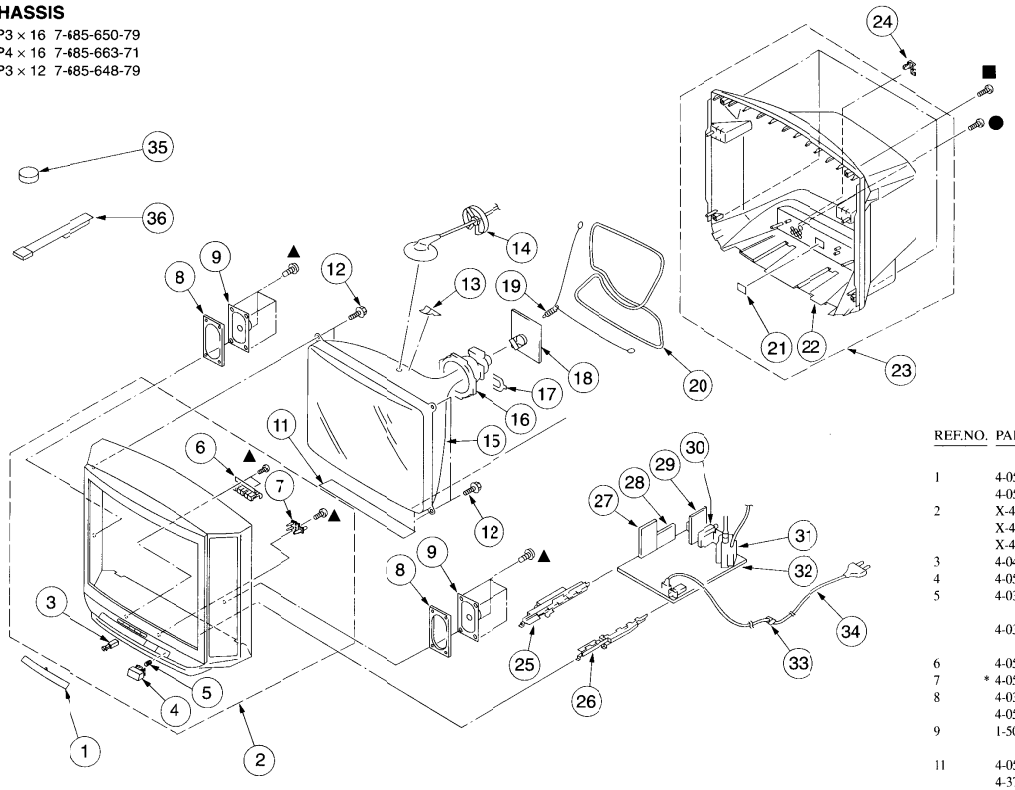
NOTE:

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

7-1. CHASSIS

● : BVTP3 × 16 7-685-650-79
■ : BVTP4 × 16 7-685-663-71
▲ : BVTP3 × 12 7-685-648-79

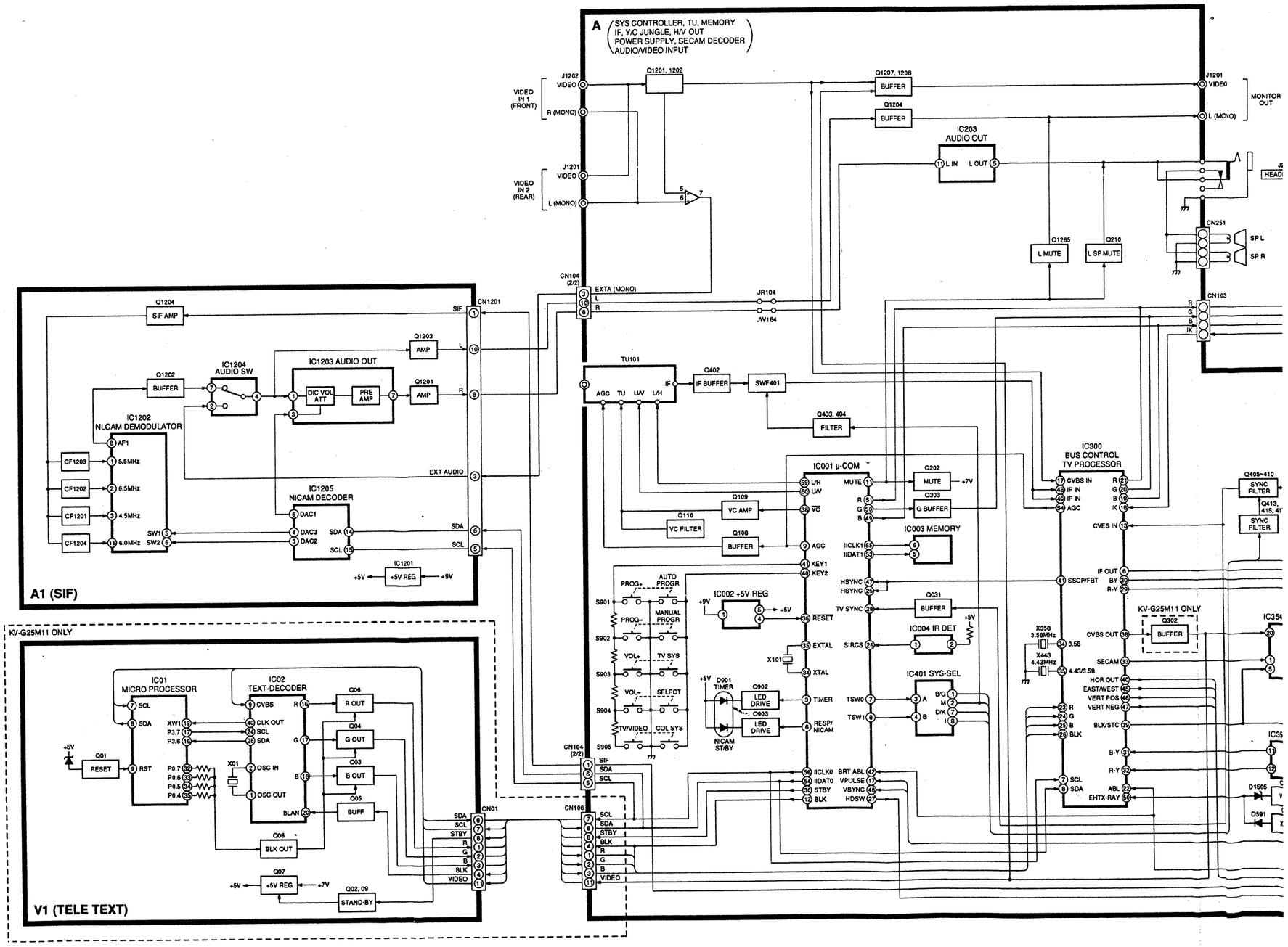


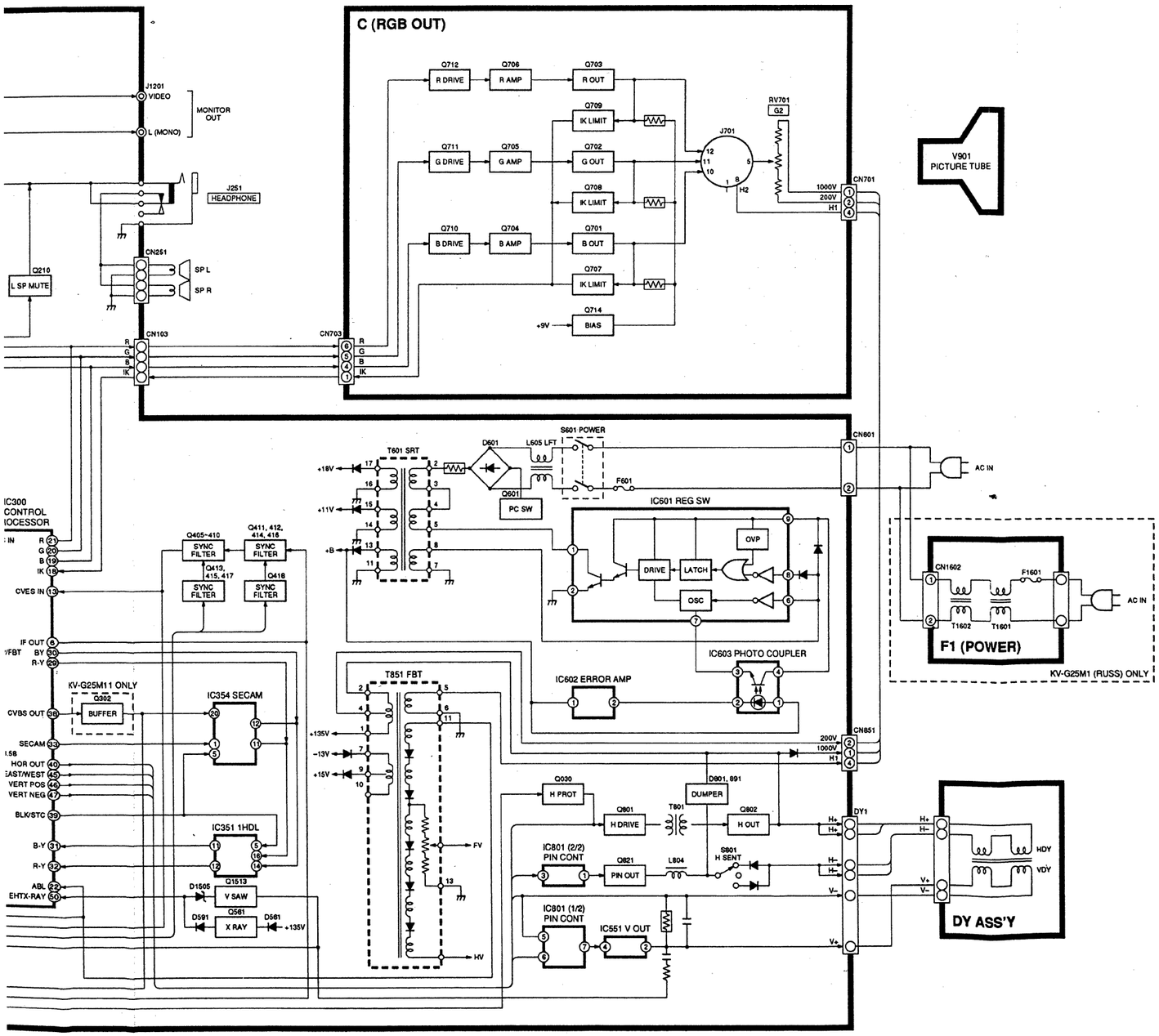
REF.NO.	PART NO.	DESCRIPTION	REMARK
1	4-05[illegible]-544-21	DOOR, CONTROL (KV-J21MF1(ID)/J21MF5(VT))	
	4-05[illegible]-544-11	DOOR, CONTROL (KV-J21MN1)	
2	X-4084-557-1	BEZNET ASSY (KV-J21MF1(ID))	3-7
	X-4084-658-1	BEZNET ASSY (KV-J21MF5(VT))	3-7
	X-4084-558-1	BEZNET ASSY (KV-J21MN1)	3-7
3	4-04[illegible]-464-01	CATCHER, PUSH	
4	4-05[illegible]-546-01	BUTTON, POWER	
5	4-03[illegible]-405-41	SPRING, COMPRESSION (KV-J21MF1(ID)/J21MN1)	
	4-03[illegible]-405-11	SPRING, COMPRESSION (KV-J21MF5(VT))	
6	4-05[illegible]-545-01	BUTTON, MULTI	
7	* 4-05[illegible]-547-01	GUIDE, LIGHT	
8	4-03[illegible]-613-01	CUSHION, SP (KV-J21MF5(VT))	
	4-05[illegible]-408-01	CUSHION, SPEAKER (KV-J21MF1(ID)/J21MN1)	
9	1-50[illegible]-902-11	SPEAKER (KV-J21MF1(ID)/J21MN1)	
11	4-05[illegible]-468-01	SHEET, BLOTTING (KV-J21MF1(ID)/J21MN1)	
	4-37[illegible]-556-11	SHEET, BLOTTING (KV-J21MF5(VT))	
12	4-05[illegible]-862-01	SCREW, TAPPING 5+CROWN WASHER	
13	4-04[illegible]-600-11	SPACER, DY	
14	* 3-70[illegible]-372-11	HOLDER, HV CABLE	
15	⚠ 8-73[illegible]-774-05	PICTURE TUBE (A51JUH71X)	
16	8-45[illegible]-280-33	DEFLECTION YOKE (Y21PXA2)	
17	1-45[illegible]-277-00	MAGNET, BMC	
18	* A-1331-697-A	C BOARD, COMPLETE (KV-J21MF1(ID))	
	* A-1331-591-A	C BOARD, COMPLETE (KV-J21MF5(VT))	
	* A-1331-698-A	C BOARD, COMPLETE (KV-J21MN1)	
19	4-36[illegible]-318-61	SPRING, TENSION	
20	⚠ 1-40[illegible]-942-21	COIL, DEMAGNETIZATION	

REF.NO.	PART NO.	DESCRIPTION	REMARK
21	4-049-416-01	SHEET, BLIND	
22	⚠ 4-055-543-01	COVER, REAR	
23	X-4034-029-1	REAR COVER ASSY	21,22
24	4-049-130-01	CLAMP, CODE	
25	* 4-055-548-01	GUIDE (L), PCB	
26	* 4-055-549-01	GUIDE (R), PCB	
27	* A-1293-714-A	A11 BOARD, COMPLETE (KV-J21MF1(ID))	
	* A-1293-431-A	A11 BOARD, COMPLETE (KV-J21MF5(VT))	
	* A-1293-492-A	A11 BOARD, COMPLETE (KV-J21MN1)	
28	* A-1293-715-A	A12 BOARD, COMPLETE (KV-J21MF1(ID))	
	* A-1293-432-A	A12 BOARD, COMPLETE (KV-J21MF5(VT))	
	* A-1293-493-A	A12 BOARD, COMPLETE (KV-J21MN1)	
29	* A-1298-170-A	A3 BOARD, COMPLETE (KV-J21MN1)	
30	8-598-323-00	TUNER BT-AG401	
31	⚠ 1-453-193-21	TRANSFORMER ASSY, FLYBACK (NX-1742) (KV-J21MF1(ID)/J21MN1)	
	⚠ 1-453-193-21	TRANSFORMER ASSY, FLYBACK (NX-1742/M3A) (KV-J21MF5(VT))	
32	* A-1298-154-A	A BOARD, COMPLETE (KV-J21MF1(ID))	
	* A-1298-171-A	A BOARD, COMPLETE (KV-J21MF5(VT))	
	* A-1298-155-A	A BOARD, COMPLETE (KV-J21MN1)	
33	⚠ 4-389-778-31	HOLDER, AC CORD (KV-J21MF1(ID)/J21MN1)	
	⚠ 4-389-778-11	HOLDER, AC CORD (KV-J21MF5(VT))	
34	⚠ 1-574-062-61	CORD, POWER (WITH CONNECTOR) 2.5A/250V (KV-J21MF1(ID))	
	⚠ 1-782-173-11	CORD, POWER (KV-J21MF5(VT))	
34	⚠ 1-777-563-11	CORD, POWER (WITH CONNECTOR) 2.5A/250V (KV-J21MN1)	
35	1-452-032-00	MAGNET,DISC	
36	X-4309-608-0	PERMALLOY ASSY, CONVERGENCE (KV-J21MF1(ID)/J21MN1)	
	4-051-736-21	PIECE A(90), CONV. CORRECT (KV-J21MF5(VT))	

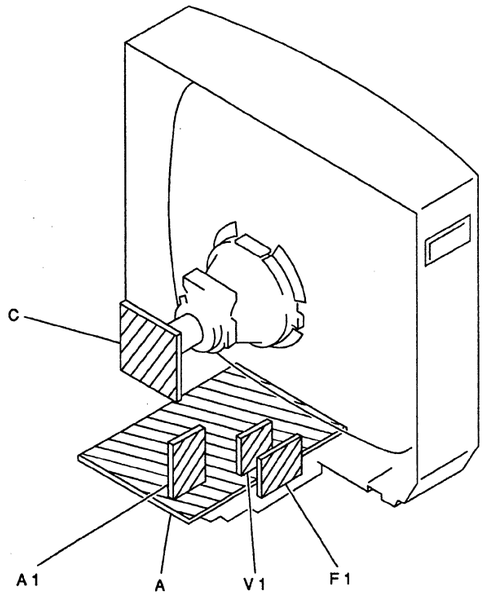
DIAGRAMS

. BLOCK DIAGRAMS




C (RGB OUT)
J1201
VIDEO
L (MONO)
MONITOR OUT
J251
HEADPHONE
CN251
SP L
SP R
Q210
L SP MUTE
CN103
R
G
B
IK
CN703
Q712
R DRIVE
Q706
R AMP
Q703
R OUT
Q709
IK LIMIT
Q711
G DRIVE
Q705
G AMP
Q702
G OUT
Q708
IK LIMIT
Q710
B DRIVE
Q704
B AMP
Q701
B OUT
Q707
IK LIMIT
Q714
+9V
BIAS
J701
RV701
G2
H2
1000V
200V
H1
CN701
V901
PICTURE TUBE
S601 POWER
D601
L605 LFT
F601
CN601
AC IN
T601 SRT
+18V
+11V
+B
Q601
PC SW
IC601 REG SW
OVP
DRIVE
LATCH
OSC
CN1602
F1601
T1602
T1601
AC IN
F1 (POWER)
KV-G25M1 (RUSS) ONLY
IC603 PHOTO COUPLER
IC602 ERROR AMP
T851 FBT
+135V
-13V
+15V
FV
HV
CN851
200V
1000V
H1
IC300
CONTROL
IOCESSOR
IN
R
G
B
IK
CVES IN
IF OUT
/FBT
BY
R-Y
Q405-410
SYNC FILTER
Q411, 412, 414, 416
SYNC FILTER
Q413, 415, 417
SYNC FILTER
Q418
SYNC FILTER
KV-G25M11 ONLY
Q302
BUFFER
CVBS OUT
SECAM
HOR OUT
EAST/WEST
VERT POG
VERT NEG
BLK/STC
B-Y
R-Y
ABL
EHTX-RAY
IC354 SECAM
IC351 1HDL
D1505
Q1513
V SAW
D591
Q561
X RAY
D561
+135V
Q030
H PROT
D901, 891
DUMPER
Q801
H DRIVE
T801
Q802
H OUT
IC801 (2/2)
PIN CONT
Q821
PIN OUT
L804
S801
H SENT
IC801 (1/2)
PIN CONT
IC551 V OUT
DY1
H+
H-
V-
V+
HDY
VDY
DY ASS'Y

CIRCUIT BOARDS LOCATION



5-3. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note:

- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytic and tantalums.
- All resistors are in ohms.
  kΩ = 100Ω, MΩ = 1000kΩ
- Indication of resistance, which does not have one for rating electrical power, is as follows.

Pitch: 5 mm
Rating electrical power 1/4W (CHIP: 1/10W)

- ▭ : nonflammable resistor.
- △ : internal component.
- ▭ : panel designation, or adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- Readings are taken with a color-bar signal input.
  no mark : PAL
  ( ) : SECAM
  〈 〉 : NTSC 4.43
- Readings are taken with a 10 MΩ digital multimeter.
- Voltage are dc with respect to ground unless otherwise noted.
- Voltage variations may be noted due to normal production tolerances.
- All voltages are in V.
- ∗ : Can not be measured.
- Circled numbers are waveform reference.
- ——— : B + bus.
- — — — : B – bus.
- ➡ : signal path.

Reference information

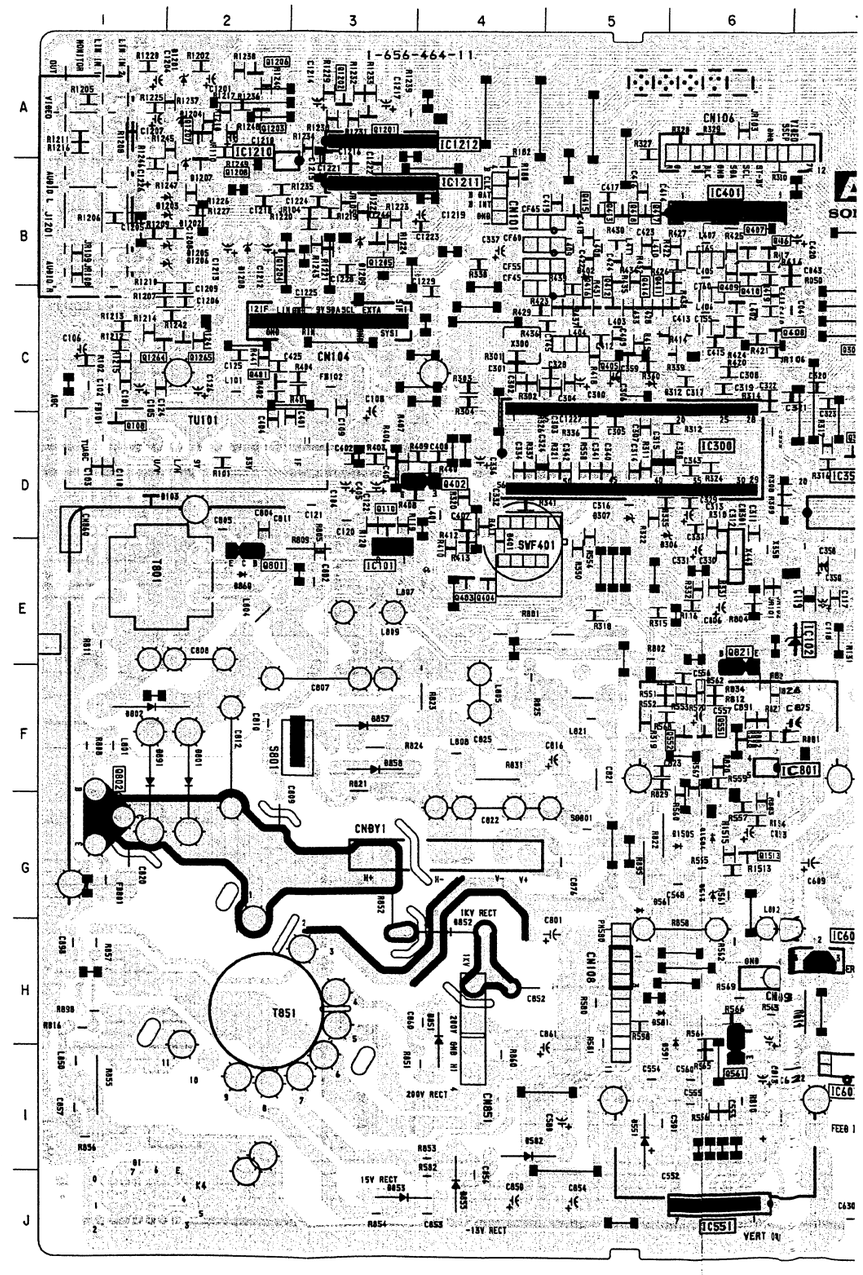
RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFRAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RS	NONFLAMMABLE METAL OXIDE
	: RB	NONFLAMMABLE CEMENT
	: RW	NONFLAMMABLE WIREWOUND
	: ※	ADJUSTMENT RESISTOR
COIL	: LF-8L	MICRO INDUCTOR
CAPACITOR	: TA	TANTALUM
	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ALB	BIPOLAR
	: ALT	HIGH TEMPERATURE
	: ALR	HIGH RIPPLE

Note: The component identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

PRINTED WIRING BOARD

A [SYS CONTROLLER, TU, MEMORY, IF, Y/C JUNGLE
H/V OUT, POWER SUPPLY, SECAM DECODER, AUDIO/VIDEO INPUT]

– A Board –



A BOARD

IC

IC001	D-11
IC002	E-10
IC003	E-11
IC004	I-13
IC102	E-7
IC203	B-10
IC300	D-6
IC351	D-8
IC354	D-7
IC401	B-6
IC521	E-8
IC551	J-6
IC601	J-8
IC602	H-7
IC603	I-7
IC801	F-6
IC1210	A-2

TRANSISTOR

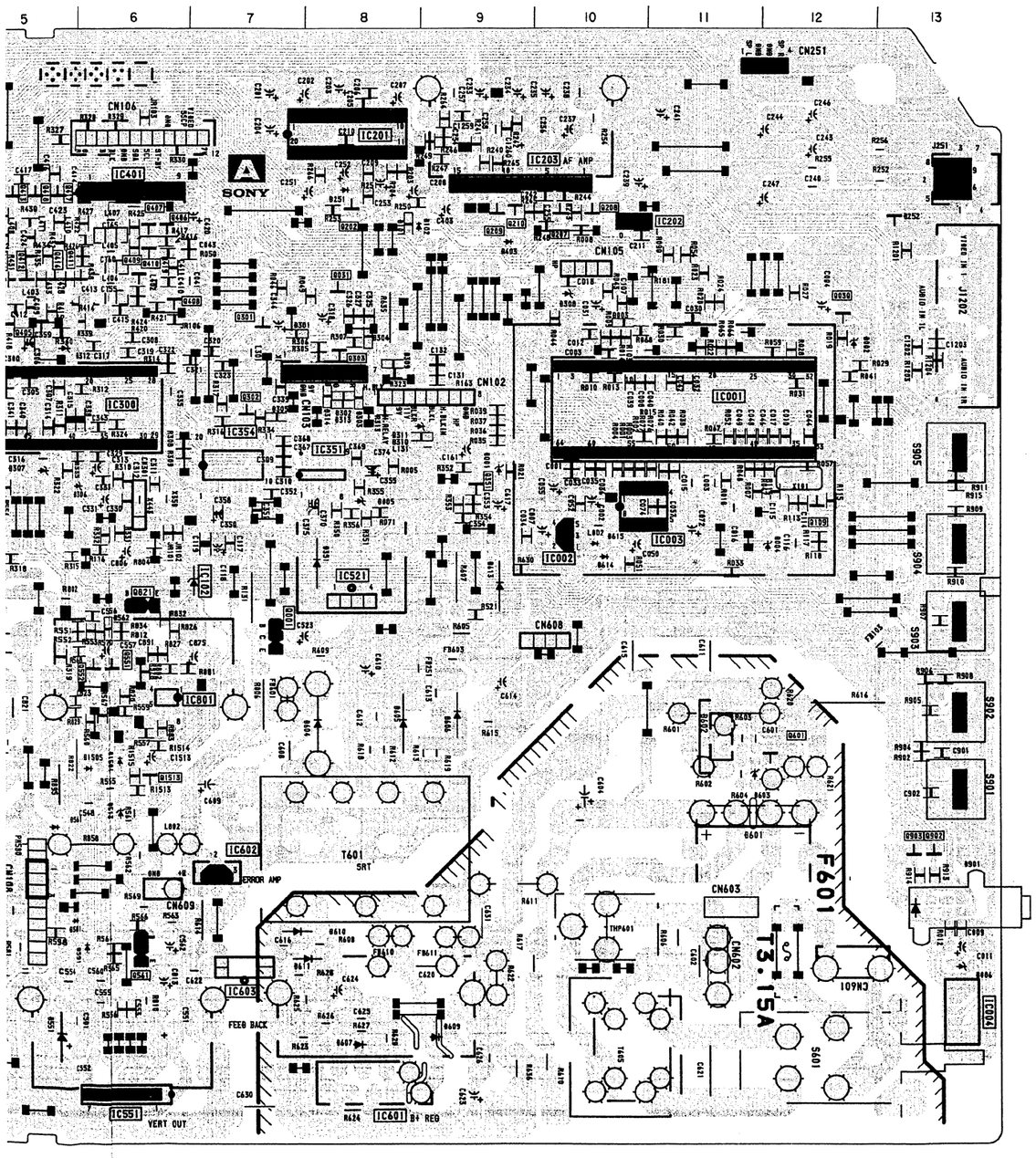
Q030	C-12
Q031	C-8
Q108	D-1
Q109	E-12
Q110	D-3
Q202	B-8
Q207	B-10
Q208	B-10
Q210	B-9
Q301	C-7
Q302	D-7
Q303	C-8
Q402	D-4
Q403	E-4
Q404	E-4
Q405	C-5
Q406	B-6
Q407	B-6
Q408	C-6
Q409	C-6
Q410	B-6
Q411	C-6
Q412	C-5
Q413	B-5
Q414	C-5
Q415	B-5
Q416	C-5
Q417	B-5
Q418	B-5
Q561	I-6
Q601	G-12
Q801	E-2
Q802	G-1
Q821	E-6
Q902	H-13
Q903	H-13
Q1201	A-3
Q1202	A-3
Q1203	A-2
Q1204	B-2
Q1207	A-2
Q1208	B-2
Q1265	C-2
Q1513	G-6

DIODE

D001	D-9
D002	C-12
D003	C-10
D004	E-12
D005	E-8
D101	B-8
D102	B-9
D103	D-1
D251	B-8
D252	B-13
D301	C-7
D302	D-8
D303	D-8
D304	C-8
D305	D-7
D306	D-6
D307	D-5
D308	C-10
D310	D-8
D311	D-8
D312	C-5
D313	D-8
D314	D-8
D351	E-8
D401	D-4
D402	B-5
D403	B-9
D513	G-6
D551	I-5
D561	G-5
D591	H-6
D601	G-11
D602	G-11
D603	G-11
D604	G-8
D605	G-8
D606	F-9
D607	I-8
D609	I-9
D610	H-7
D611	I-8
D801	F-2
D802	F-1
D851	H-4
D852	H-4
D853	J-3
D855	J-4
D857	F-3
D858	F-3
D860	E-2
D891	F-1
D901	H-13
D1201	A-2
D1202	B-2
D1207	B-2
D1208	B-2
D1504	G-6
D1505	G-6

KV-G25M1/G25M11
RM-870

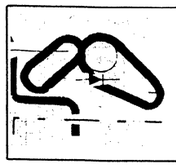
)EO INPUT]



A BOARD WAVEFORMS

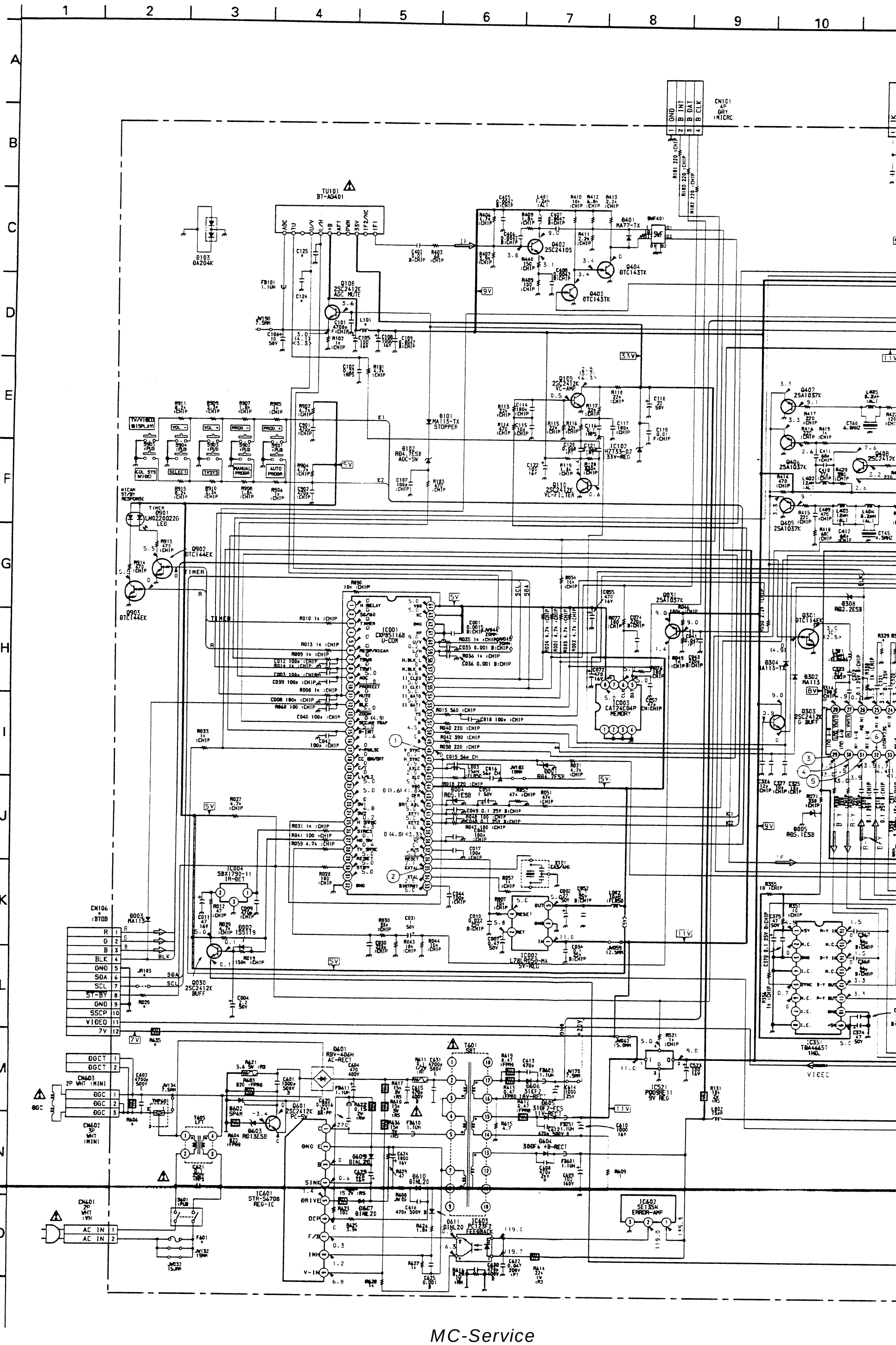
① 5.0Vp-p (H)	② 4.0Vp-p	③ PAL 0.7Vp-p (H)
③ NTSC 0.6Vp-p (H)	③ SECAM 1.6Vp-p (H)	④ PAL 0.6Vp-p (H)
④ NTSC 0.4Vp-p (H)	④ SECAM 1.2Vp-p (H)	⑤ PAL/SECAM PAL : 1.3Vp-p (H) SECAM : 1.5Vp-p (H)
⑤ NTSC 0.8Vp-p (H)	⑥ PAL/SECAM PAL : 1.0Vp-p (H) SECAM : 1.2Vp-p (H)	⑥ NTSC 0.6Vp-p (H)
⑦ PAL/SECAM 3.6Vp-p (H)	⑦ NTSC 4.0Vp-p (H)	⑧ PAL/SECAM 3.3Vp-p (H)
⑧ NTSC 4.0Vp-p (H)	⑨ PAL/SECAM PAL : 3.4Vp-p (H) SECAM : 3.0Vp-p (H)	⑨ NTSC 4.0Vp-p (H)

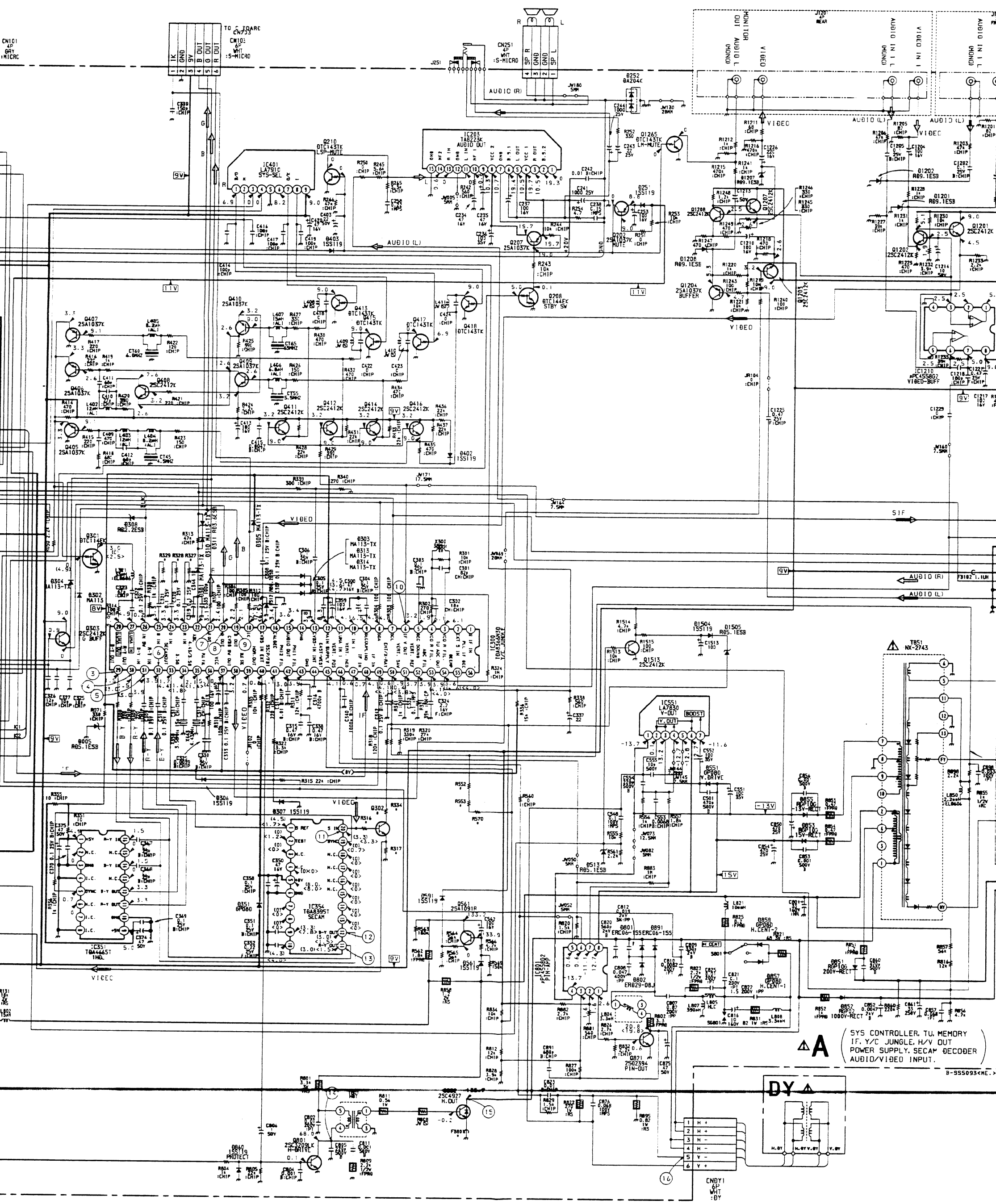
⑩ PAL 2.2Vp-p (H)	⑩ NTSC 3.0Vp-p (H)	⑩ SECAM 2.2Vp-p (H)
⑪ PAL 1.0Vp-p (H)	⑪ NTSC 1.3Vp-p (H)	⑪ SECAM 1.0Vp-p (H)
⑫ PAL 0.7Vp-p (H)	⑫ NTSC 0.6Vp-p (H)	⑫ SECAM 1.5Vp-p (H)
⑬ PAL 0.6Vp-p (H)	⑬ NTSC 0.5Vp-p (H)	⑬ SECAM 1.2Vp-p (H)
⑭ 150Vp-p (H)	⑮ 800Vp-p (H)	⑯ 2Vp-p (V)

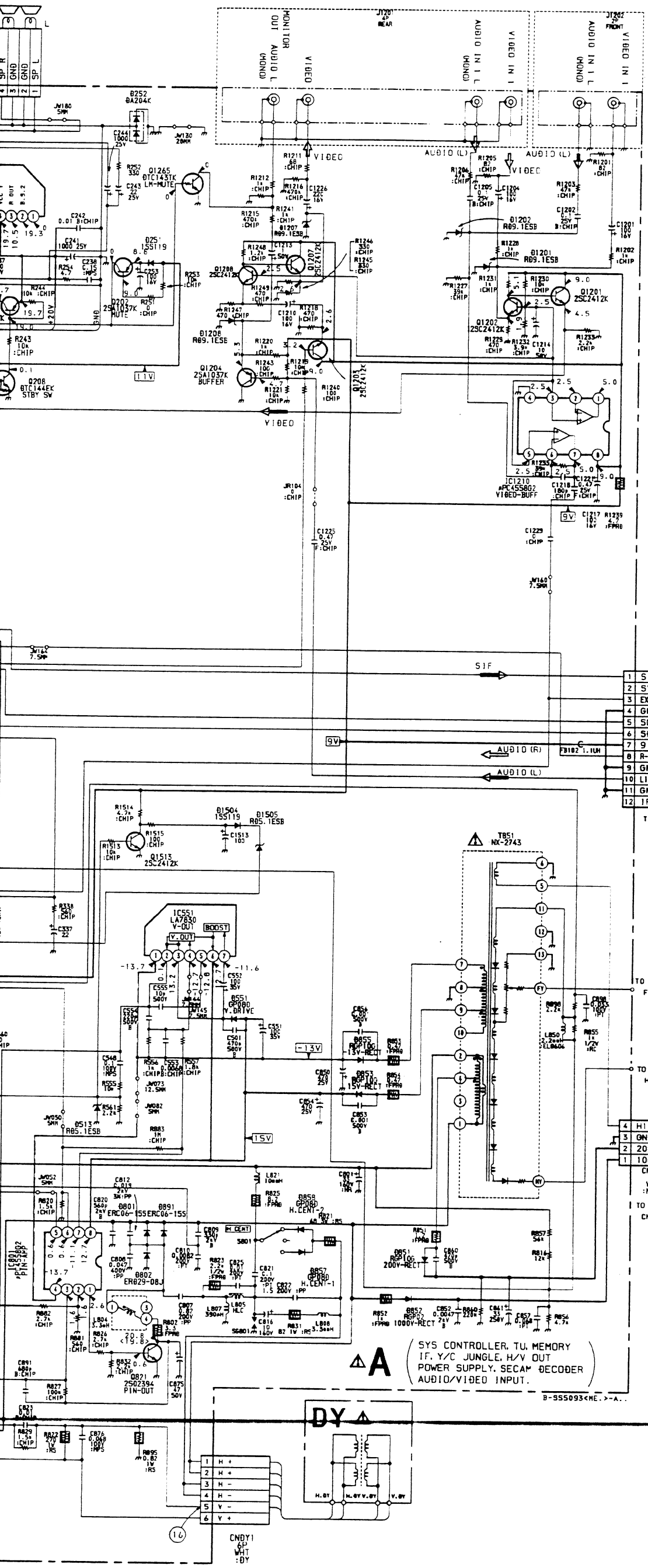


NOTE:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

(1) Schematic Diagram of A Board



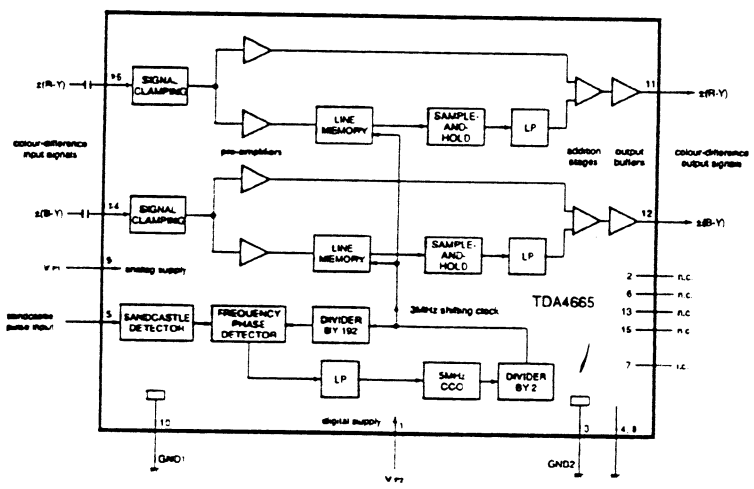

CN101 4P GRY :MICRO
CN103 6P WHT :S-MICRO
TO C BOARD CN733
IK GND 9V B OUT G OUT R OUT
CN251 4P WHT :S-MICRO
SP R GND GND SP L
J251
AUDIO (R)
AUDIO (L)
VIDEO
MONITOR OUT AUDIO L (MONO) VIDEO
J1201 4P REAR
AUDIO IN 1 L (MONO) VIDEO IN 1
AUDIO IN 1 L (MONO)
B252 BA204K
IC203 TA8223K AUDIO OUT
IC401 LA7910 SYS-SEL
Q210 DTC143TK LSP-MUTE
Q1265 DTC143TK LM-MUTE
Q207 2SA1037K
Q208 DTC144EK STBY SW
Q1204 2SA1037K BUFFER
Q1208 2SC2412K
Q1201 2SC2412K
Q1202 2SC2412K
Q1207 2SC2412K
Q1203 2SA1037K
Q1205 2SA1037K
Q1206 2SC2412K
Q1209 2SC2412K
IC1210 APC4558G2 VIDEO-BUFF
Q410 2SA1037K
Q413 DTC143TK
Q415 DTC143TK
Q412 DTC143TK
Q418 DTC143TK
Q407 2SA1037K
Q409 2SA1037K
Q408 2SC2412K
Q405 2SA1037K
Q411 2SC2412K
Q412 2SC2412K
Q414 2SC2412K
Q416 2SC2412K
Q402 1SS119
Q301 DTC114EK
Q304 MA113-TX
Q302 MA113
Q303 2SC2412K G BUFF
Q305 MA113-TX
Q306 1SS119
Q307 1SS119
Q308 RD2.2ESB
Q309 RD5.1ESB
Q310 MA113-TX
Q311 RD3.6ESB
Q312 MA113-TX
Q313 MA113-TX
Q314 MA113-TX
Q315 MA113-TX
Q303 MA113-TX
IC300 TDA8366N5D Y/C JUNGLE
IC354 TBA839ST SECAM
IC351 TBA466ST 1H&L
Q302 2SC4927 H.OUT
Q801 2SC4208LK H-DRIVE
Q804 1SS119 PROTECT
Q1504 1SS119
Q1505 RD5.1ESB
Q1513 2SC2412K
IC551 LA7830 V-OUT
Q551 GP080 V.DRIVE
Q513 RD5.1ESB
Q561 2SA1091R
Q801 ERC06-15
Q802 ERB29-08J
Q891 ERC06-15
IC801 PQ12SG2 PIN-APP
IC821 7S02394 PIN-OUT
Q858 GP08D H.CENT-2
Q857 GP08D H.CENT-1
Q851 RGP10G 200V-RECT
Q852 RGP02 1000V-RECT
Q853 RGP10G 15V-RECT
Q854 RGP10G -13V-RECT
TB51 NX-2743
CNDY1 6P WHT :DY
SYS CONTROLLER, TU, MEMORY
IF, Y/C JUNGLE, H/V OUT
POWER SUPPLY, SECAM DECODER
AUDIO/VIDEO INPUT.
B-955093<ME.>
MC-Service



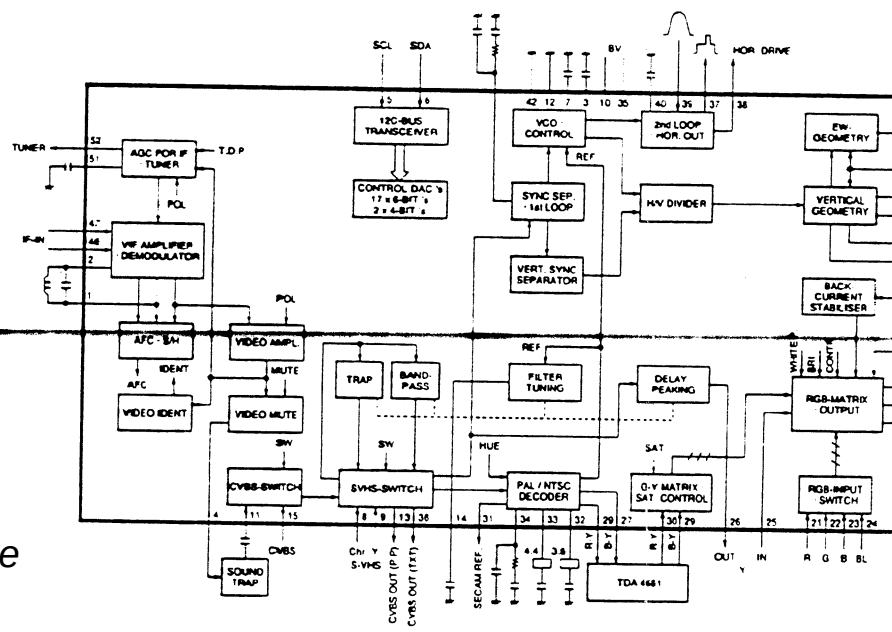
A BOARD * MARK LIST

	KV-G25M1(ME)	KV-G25M1(HK)	KV-G25M1(
CN106	NOT USED	NOT USED	NOT US
CN601	TO POWER CORD	TO POWER CORD	TO F1 BOARD
F601	T3.15A	T3.15A	NOT US
FB801	1.1uH	1.1uH	1.9uH
JR103	NOT USED	NOT USED	NOT US
JW032	NOT USED	NOT USED	15MM
JW132	NOT USED	NOT USED	15MM
Q302	NOT USED	NOT USED	NOT USE
R020	NOT USED	NOT USED	NOT USE
R316	NOT USED	NOT USED	NOT USE
R317	NOT USED	NOT USED	NOT USE
R327	0 : CHIP	0 : CHIP	0 : CHIP
R328	0 : CHIP	0 : CHIP	0 : CHIP
R329	0 : CHIP	0 : CHIP	0 : CHIP
R334	NOT USED	NOT USED	NOT USE
R552	NOT USED	NOT USED	220K : CHIP
R553	NOT USED	NOT USED	0 : CHIP
R570	NOT USED	NOT USED	0 : CHIP
R635	NOT USED	NOT USED	NOT USE

A BOARD IC351 TDA4665T



A BOARD IC300 TDA8366N3D



CN104
12P
:BTOB

1	SIF
2	SYS1 (M/S)
3	EXTA MONO
4	GND
5	SCL
6	SDA
7	9 (V)
8	R-IN VOL OUT
9	GND
10	LIN(TV OUT)
11	GND
12	IF

TO A1 BOARD
CN1201

TO C BOARD
FOCUS

TO PICTURE TUBE
HV

4	H1
3	GND
2	200V
1	1000V

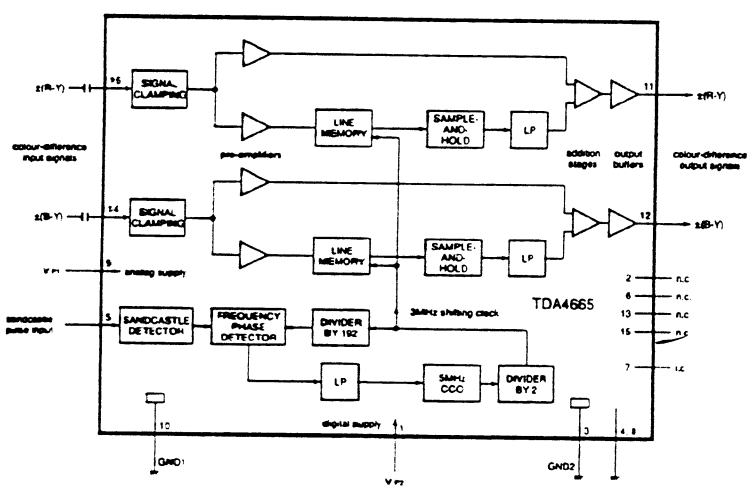
CN851
4P
WHT
:MINI

TO C BOARD
CN701

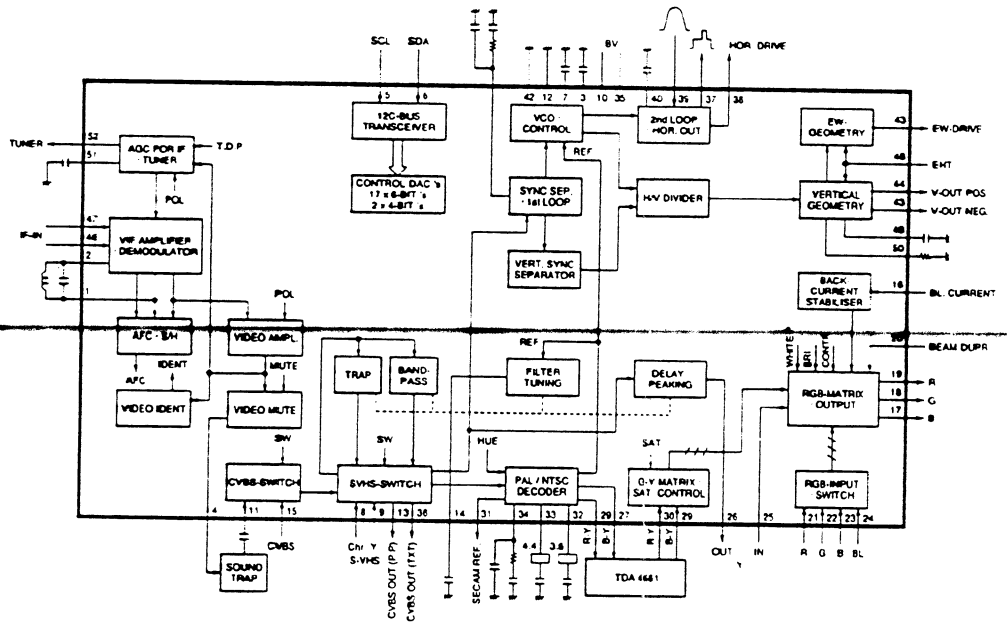
A BOARD * MARK LIST

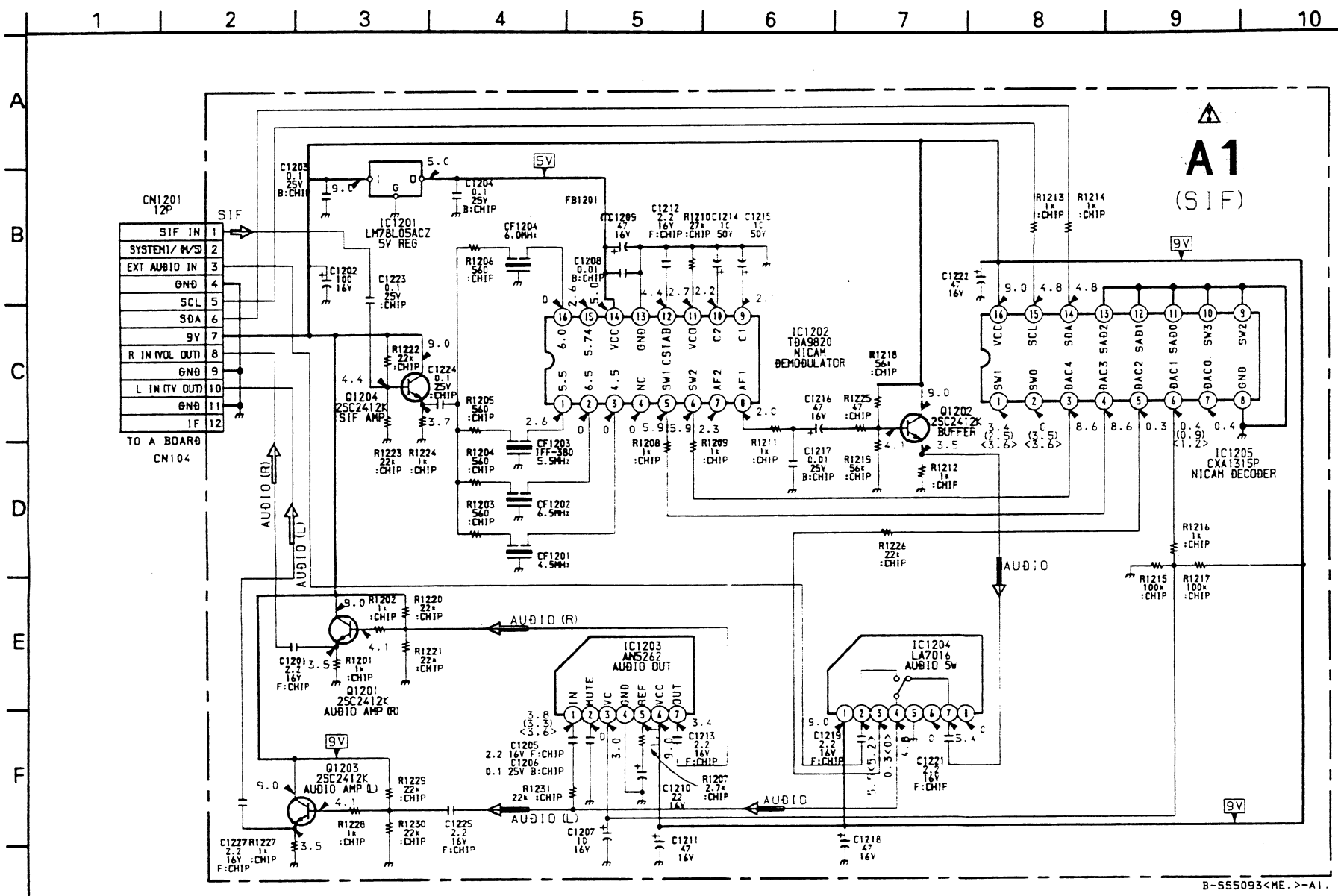
	KV-G25M1(ME)	KV-G25M1(HK)	KV-G25M1(RUSS)	KV-G25M11
CN106	NOT USED	NOT USED	NOT USED	12P : BTOB
CN601	TO POWER CORD	TO POWER CORD	TO F1 BOARD CN1602	TO POWER CORD
F601	T3.15A	T3.15A	NOT USED	T3.15A
FB801	1.1uH	1.1uH	1.9uH	1.1uH
JR103	NOT USED	NOT USED	NOT USED	0 : CHIP
JW032	NOT USED	NOT USED	15MM	NOT USED
JW132	NOT USED	NOT USED	15MM	NOT USED
Q302	NOT USED	NOT USED	NOT USED	2SC2412K
R020	NOT USED	NOT USED	NOT USED	100 : CHIP
R316	NOT USED	NOT USED	NOT USED	4.7K : CHIP
R317	NOT USED	NOT USED	NOT USED	1K : CHIP
R327	0 : CHIP	0 : CHIP	0 : CHIP	100 : CHIP
R328	0 : CHIP	0 : CHIP	0 : CHIP	100 : CHIP
R329	0 : CHIP	0 : CHIP	0 : CHIP	100 : CHIP
R334	NOT USED	NOT USED	NOT USED	470 : CHIP
R552	NOT USED	NOT USED	220K : CHIP	220K : CHIP
R553	NOT USED	NOT USED	0 : CHIP	0 : CHIP
R570	NOT USED	NOT USED	0 : CHIP	0 : CHIP
R635	NOT USED	NOT USED	NOT USED	22 2W :RS

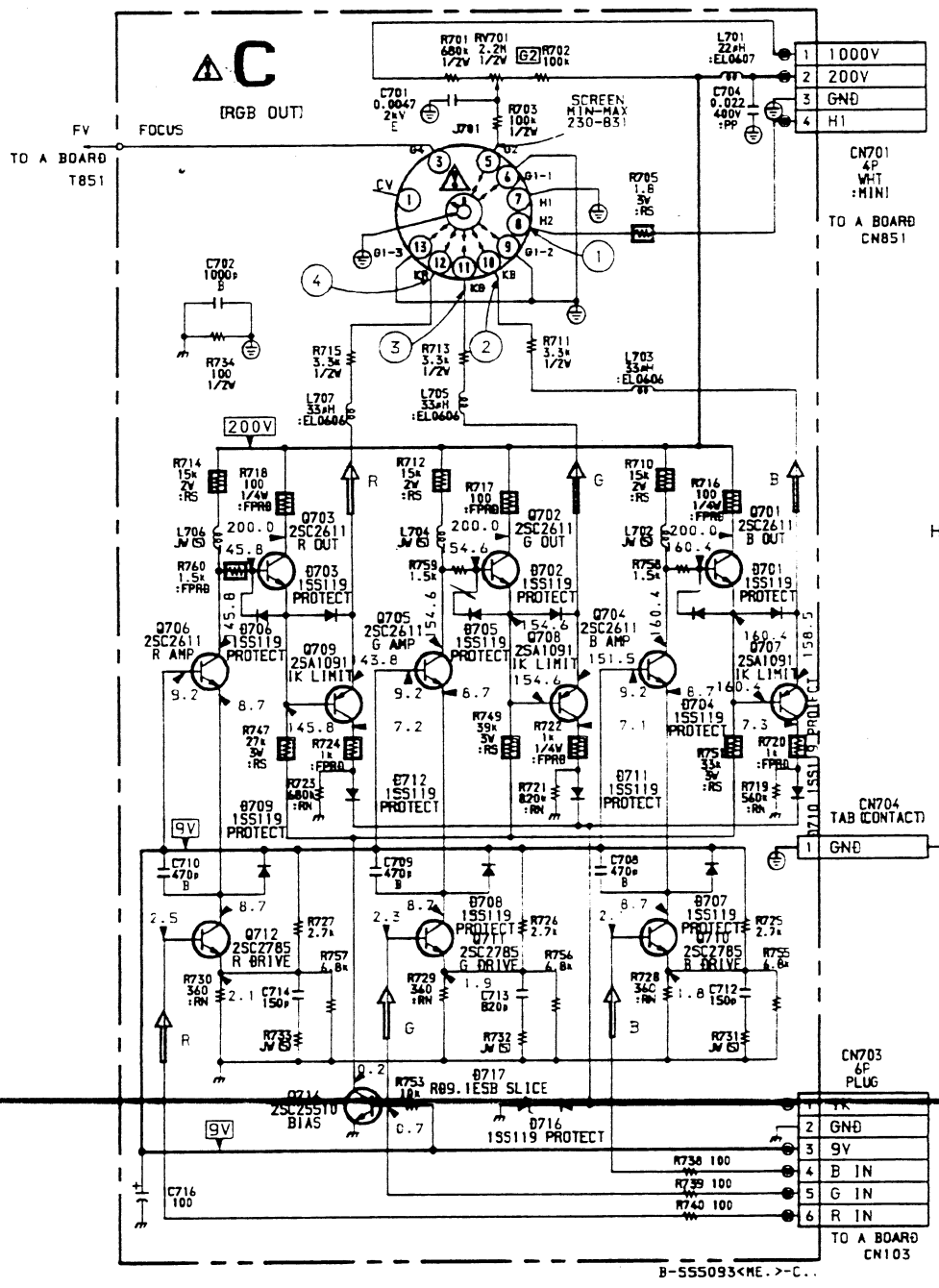
A BOARD IC351 TDA4665T

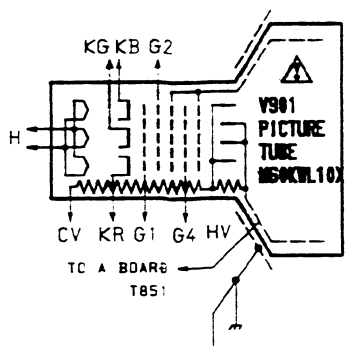


A BOARD IC300 TDA8366N3D









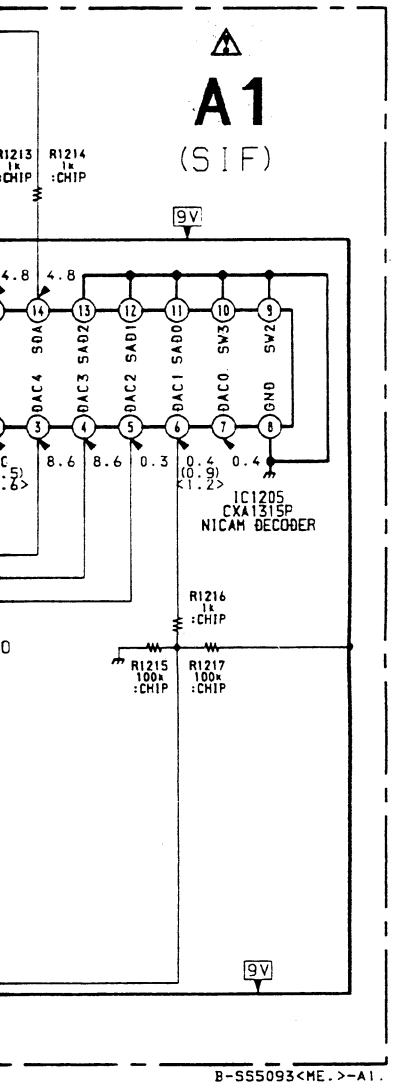
C BOARD WAVEFORMS

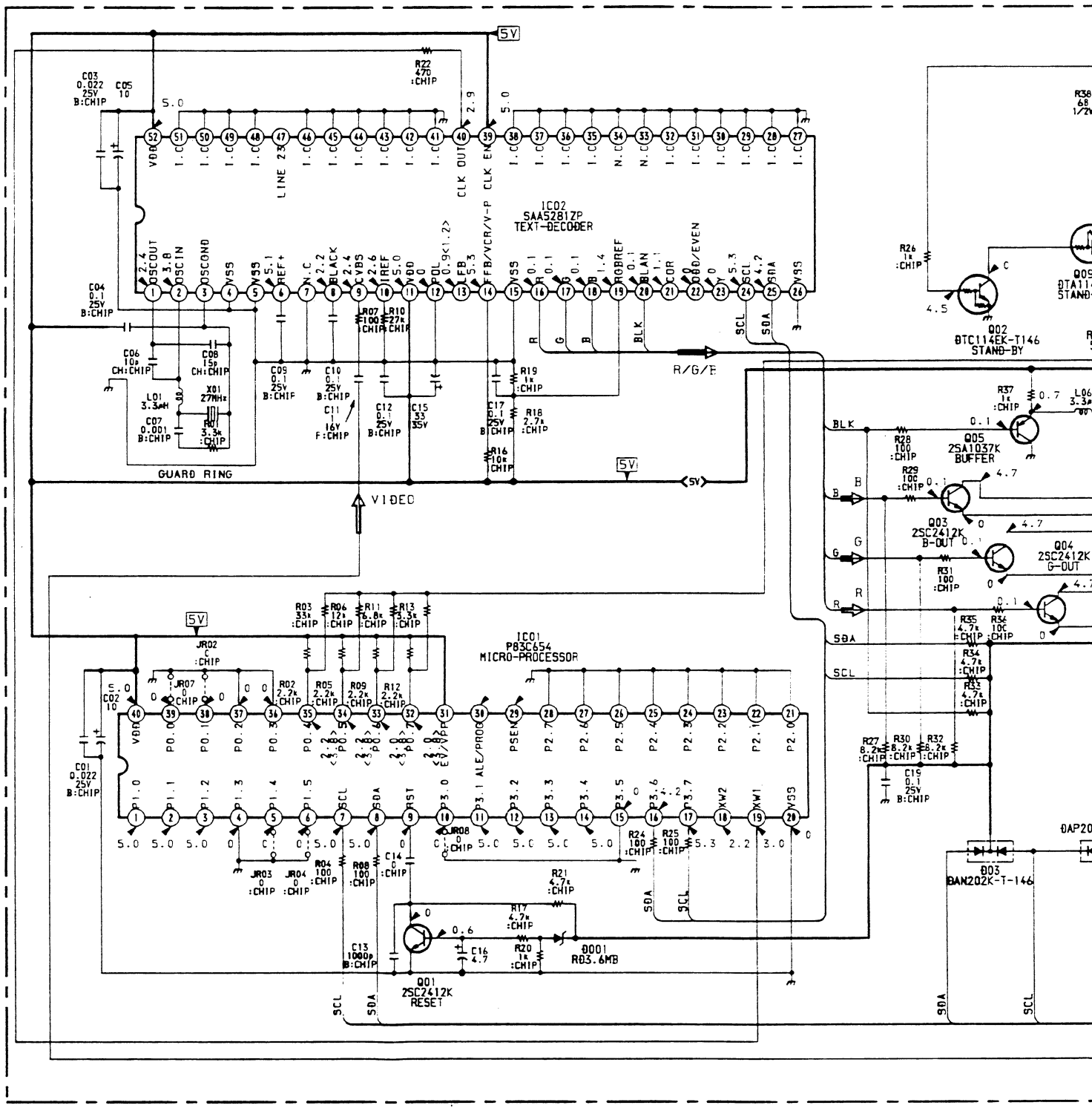
① 22Vp-p (H)	② PAL/SECAM 110Vp-p (H)
② NTSC 150Vp-p (H)	③ PAL/SECAM PAL : 100Vp-p (H) SECAM : 140Vp-p (H)
③ NTSC 150Vp-p (H)	④ PAL/SECAM 140Vp-p (H)
④ NTSC 150Vp-p (H)	

Schematic diagram
← A board

Schematic diagrams
A1, C, F1, V1 boards →

(KV-G25M11 only)

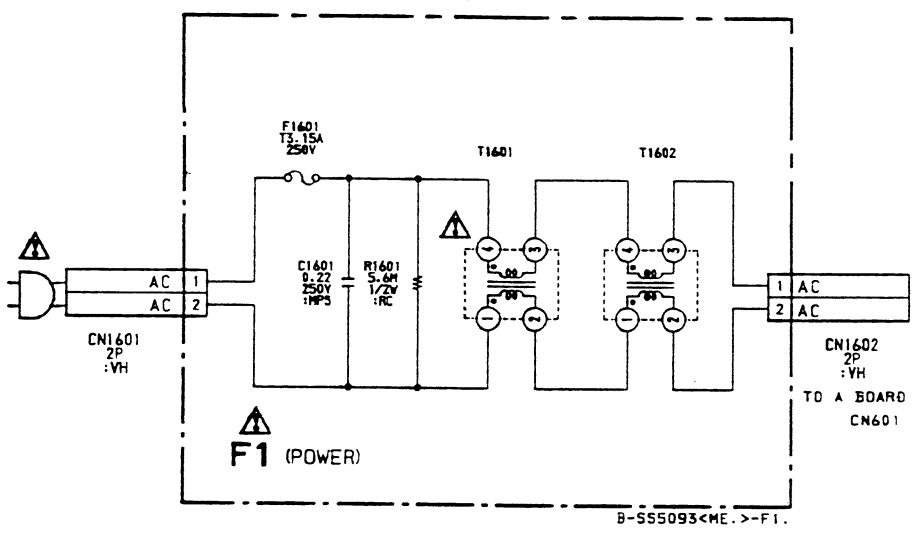




C BOARD WAVEFORMS

① 22Vp-p (H)	② PAL/SECAM 110Vp-p (H)
② NTSC 150Vp-p (H)	③ PAL/SECAM PAL : 100Vp-p (H) SECAM : 140Vp-p (H)
③ NTSC 150Vp-p (H)	④ PAL/SECAM 140Vp-p (H)
④ NTSC 150Vp-p (H)	

(KV-G25M1 (RUSS) only)



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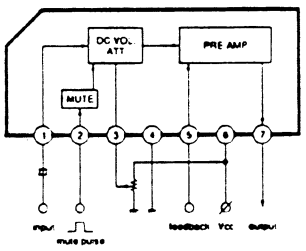
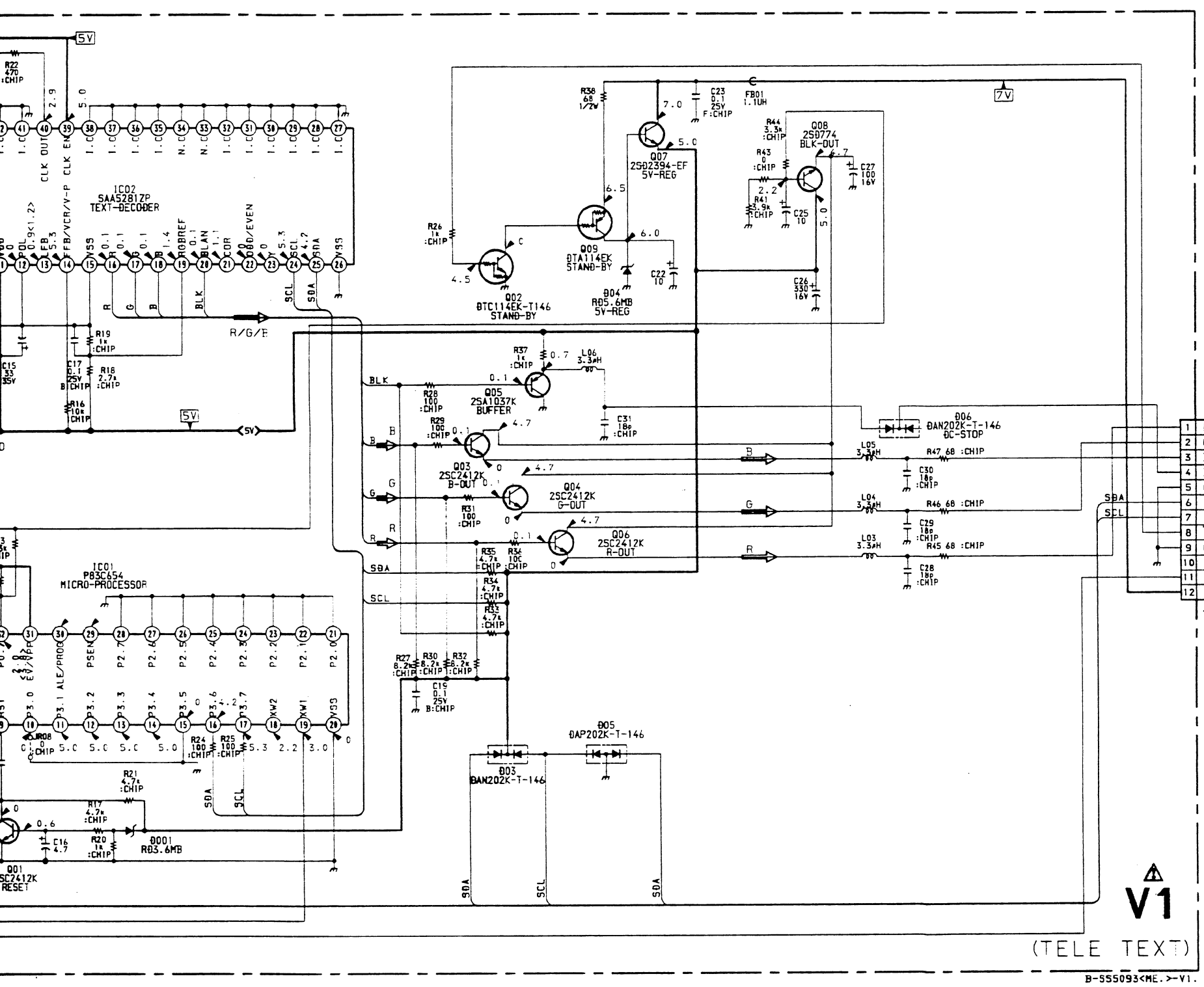
A1 BOARD IC1203 AN5262



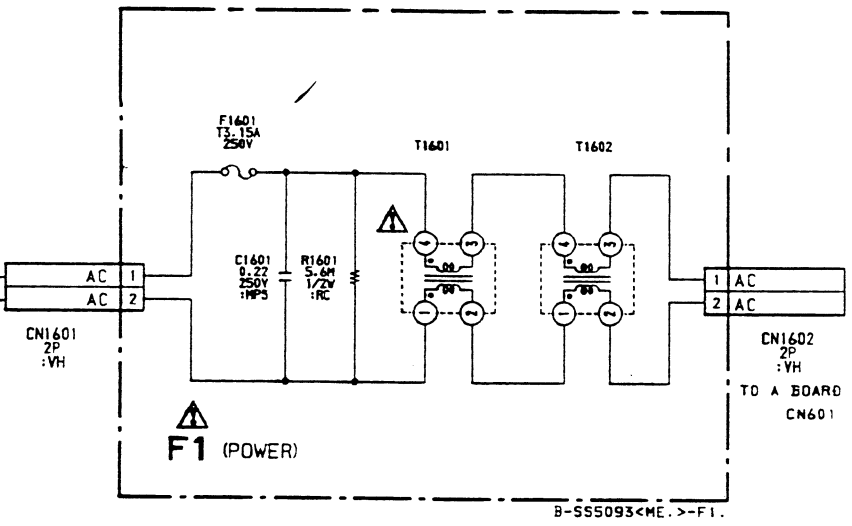
MC-Service

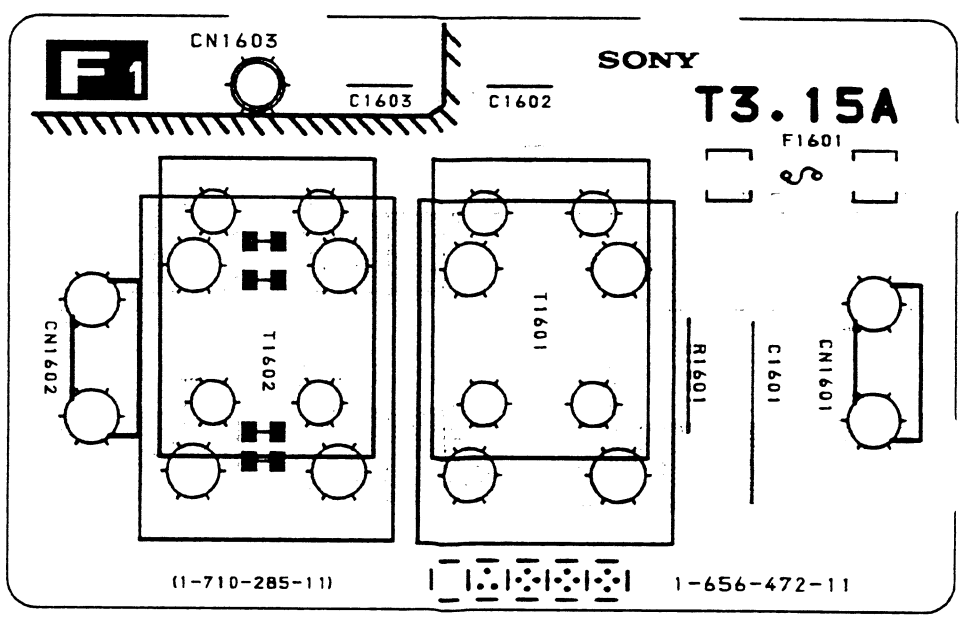


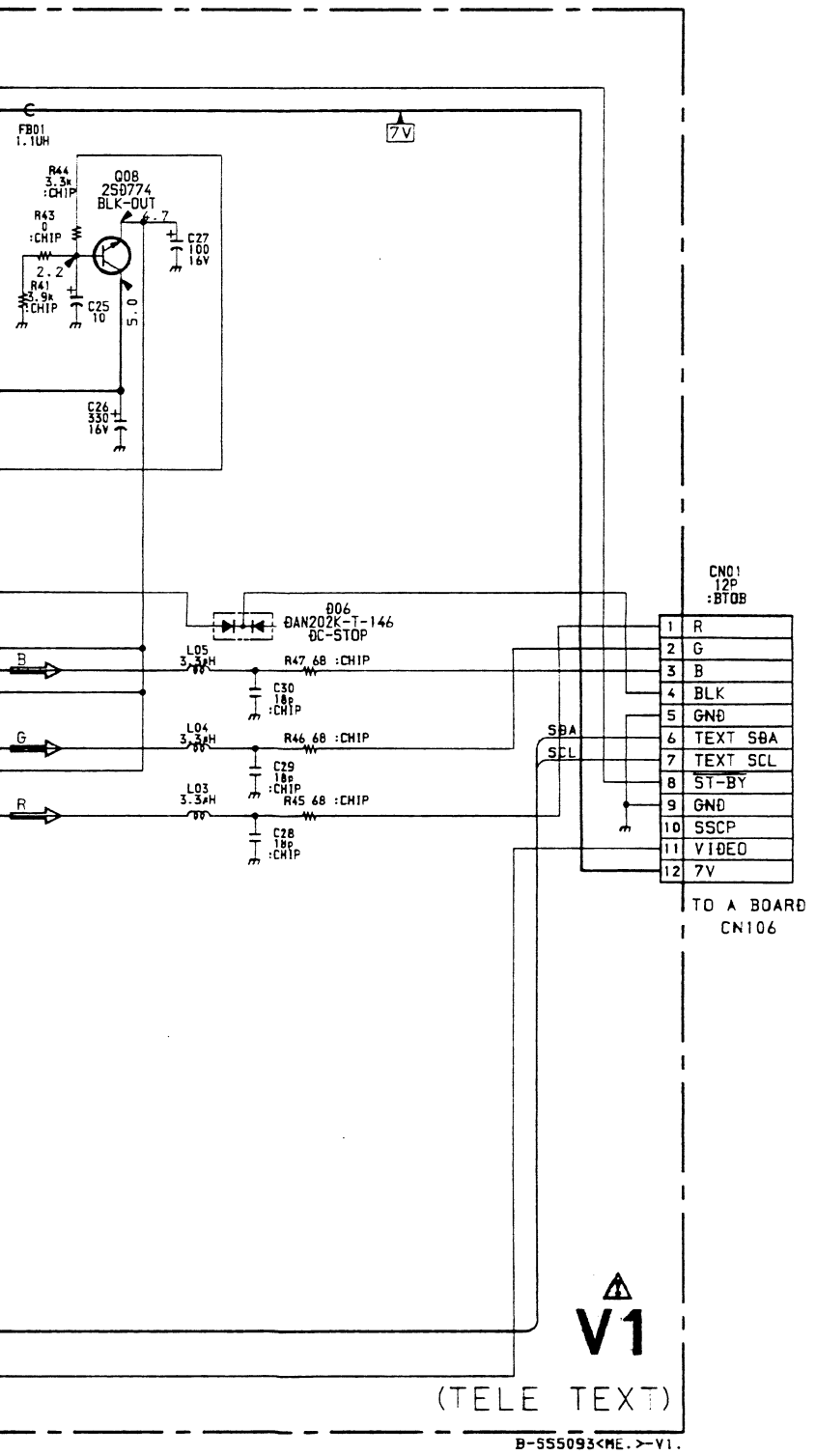
PRINTED WIRING BOARD **F1** [POWER]

– F1 Board – **(KV-G25M1 (RUSS) only)**

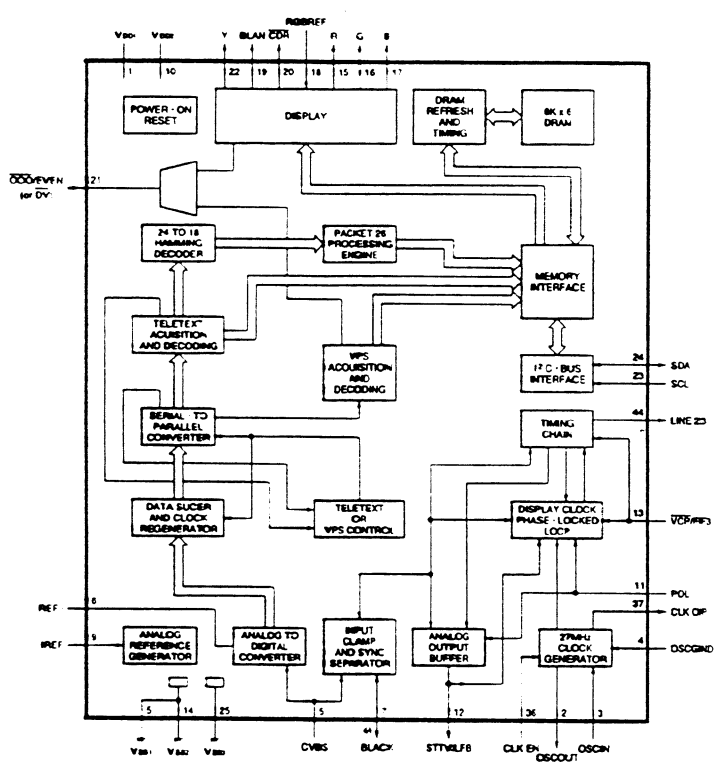
(KV-G25M1 (RUSS) only)





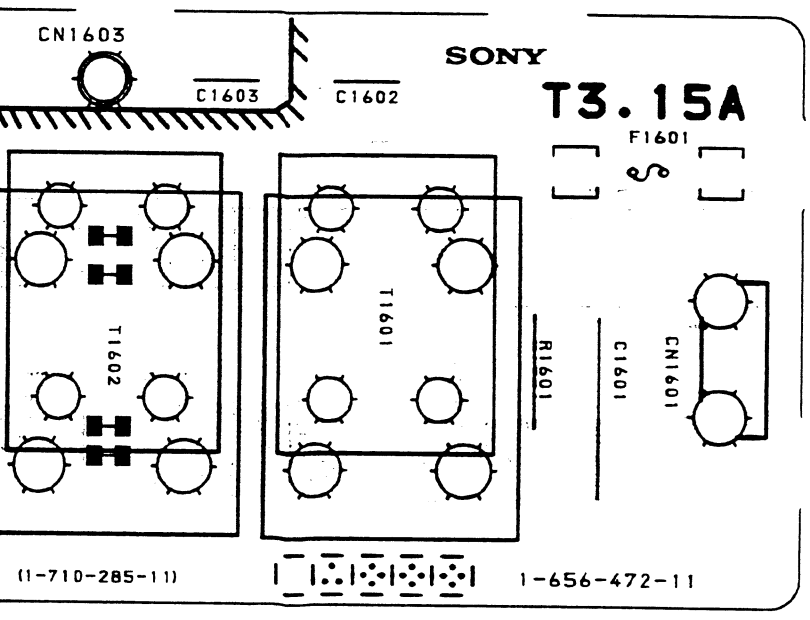


V1 BOARD IC02 SAA5281ZP



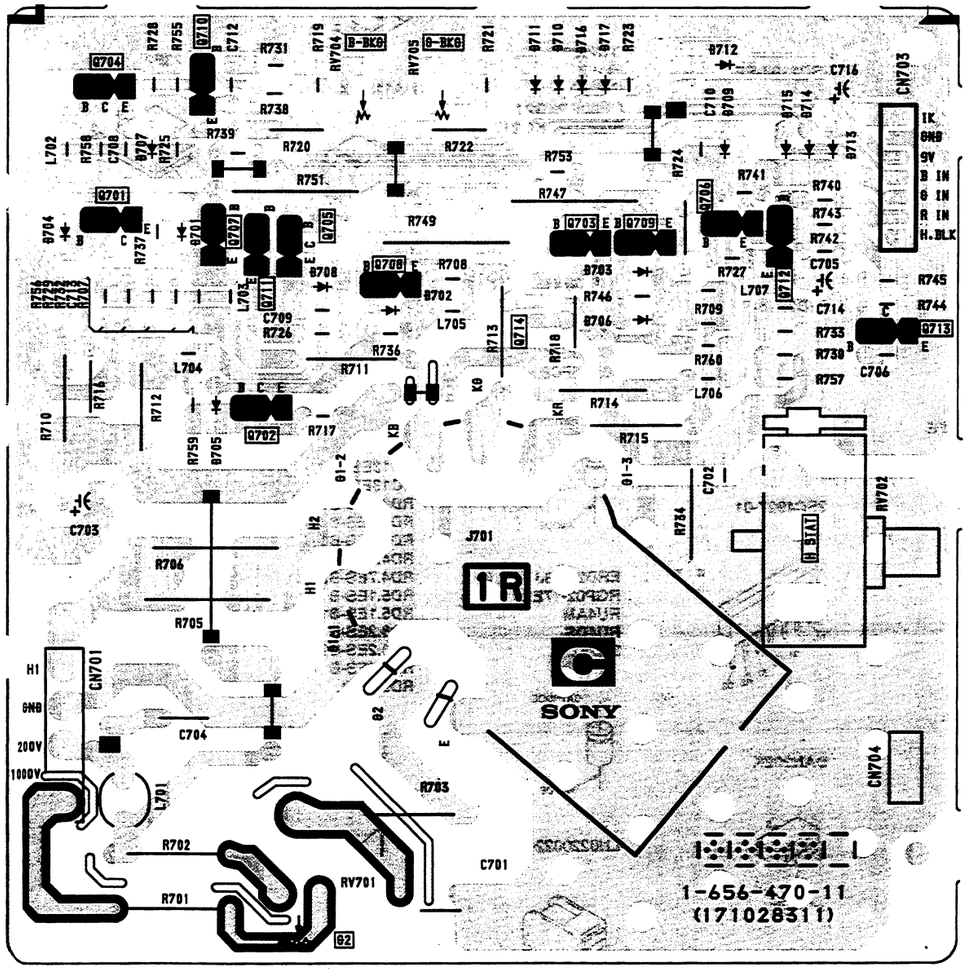
WIRING BOARD **F1** [POWER]

– (KV-G25M1 (RUSS) only)

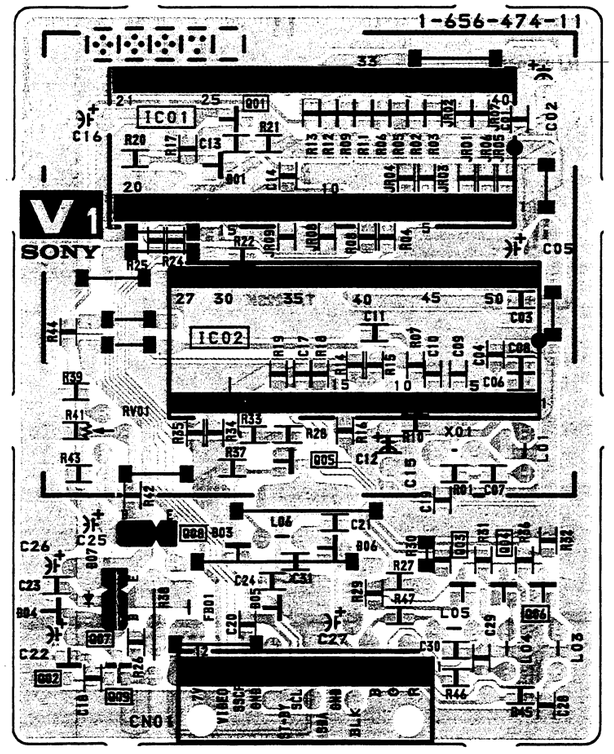


PRINTED WIRING BOARDS **A1** [SIF] **C** [RGB OUT] **V1** [TELE TEXT]

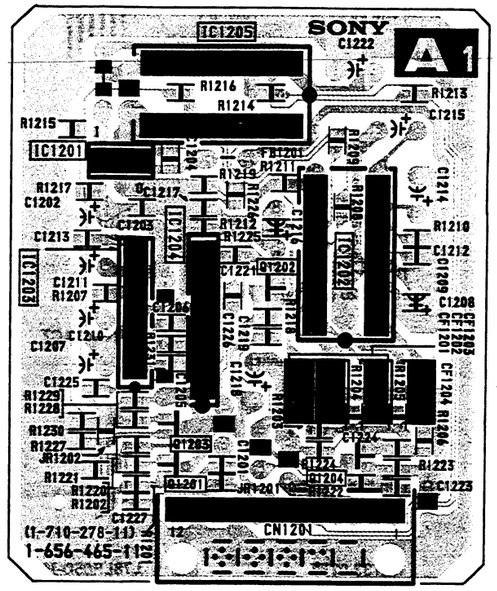
– C Board –



– V1 Board – **(KV-G25M11 only)**

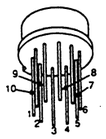


– A1 Board –

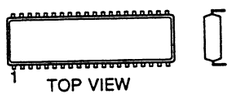


SEMICONDUCTORS

AN5262

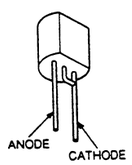


CAT24C04P (8PIN)
CXA1110BS (30PIN)
CXA1315P (16PIN)
CXP85116B-615S (64PIN)
CXP85224A-010S (64PIN)
P83C654 (40PIN)
SAA5281ZP (52PIN)
TDA4665T (16PIN)
TDA8366N3D (56PIN)
TDA8395T (20PIN)
TDA8424 (20PIN)
TDA9820 (16PIN)

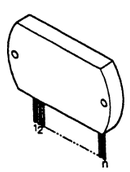


Dual In-line Package
Pin 6 ~ 98

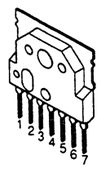
HZT33-02TE
µPC574J



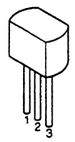
LA7016



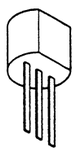
LA7830



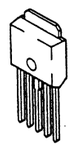
LA7910



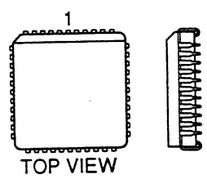
LM78L05ACZ



L78LR05D-MA

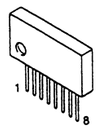


MSP3410 (44PIN)

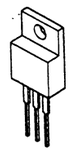


Quad Flat J-leaded Package
Pin 20 ~ 996

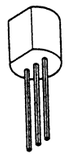
NJM2234L



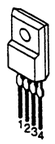
NJM7805FA



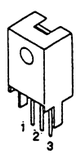
NJM78L12A



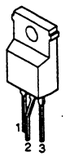
PQ09RE11



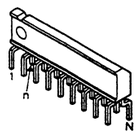
SBX1790-11
SBX1790-51



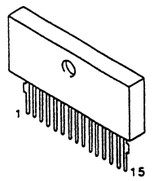
SE-135N



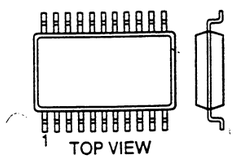
STR-S6708



TA8223K



µPC4558G2 (8PIN)

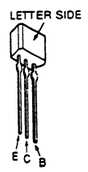


Small Outline L-leaded Package
Pin 8 ~ 98

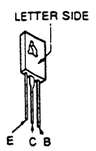
DTA114EK
DTC114EK
DTC143TK
DTC144EK
2SA1037K-QR
2SA1162-G
2SC1623-L5L6
2SC2412K-QR
2SC2712-YG

2SA1091
2SA1091-O
2SC2551-O

2SC2410SN
2SC2785-HFE



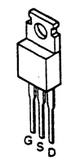
2SC2611



2SC2669-O

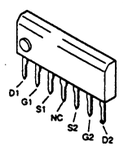
2SC3209LK
2SD774-34

2SD2394-EF

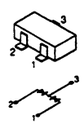


2SD2394-F

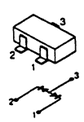
2SC4927-01



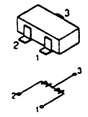
DAN202K



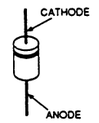
DAP202K



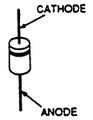
DA204K



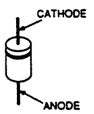
D1NL20
EL-1Z
GP08D
GP08DPKG23
RGP10GPKG23



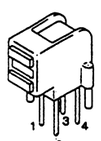
ERC06-15S
S3L20UF4
30DF6FC8



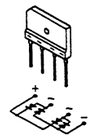
ERD29-08J
RGP02-17EL
RU4AM
RU4DS
31DF2



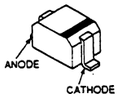
LN0220022G



LN4SB60
RBV-406H

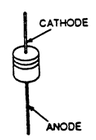


MA113-TX

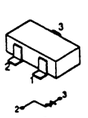


MA77-TX

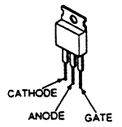
RD13ES-B
RD13ES-B2
RD2.2ES-B
RD3.6ES-B
RD3.6ES-B1
RD4.7ES-B
RD4.7ES-B2
RD5.1ES-B
RD5.1ES-B1
RD8.2ES-B
RD8.2ES-B2
RD9.1ES-B
RD9.1ESL



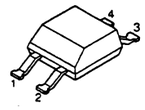
RD3.6M-B
RD3.6M-B1
RD5.6M-B
RD5.6M-B2



5P4M



PC123F2



EXPLODED VIEWS

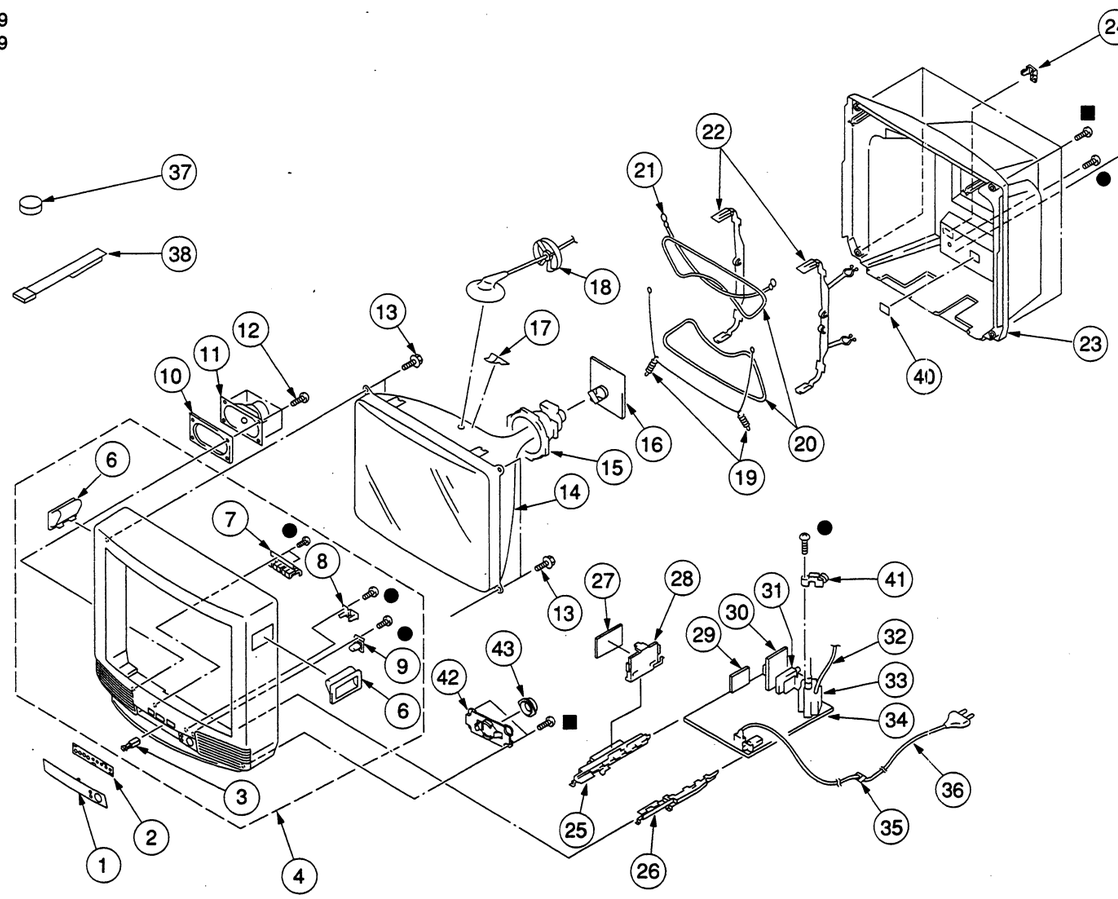
NOTE:

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

6-1. CHASSIS

●: BVTP3 × 12 7-685-648-79
■: BVTP4 × 16 7-685-663-79



REF.NO.	PART NO.	DESCRIPTION	REMARK
1	4-048-702-11	DOOR, CONTROL	
2	4-048-575-11	LABEL, CONTROL	
3	4-627-936-01	LOCK, MINIATURE SIDE	
4	X-4032-787-1	BEZNET ASSY	
6	4-048-691-01	HANDLE	
7	4-048-687-01	BUTTON, MULTI	
8	4-049-123-01	GUIDE, LIGHT	
9	4-048-688-01	BUTTON, POWER	
10	4-037-613-01	CUSHION, SP	
11	1-504-305-11	SPEAKER (5X12CM)	
12	4-043-388-01	SCREW, STEP TAPPING	
13	4-390-505-01	SCREW (7), TAPPING	
14	⚠ 8-733-242-05	PICTURE TUBE (M68KWL10X)	
15	⚠ 8-451-404-11	DEFLECTION YOKE (Y25GAS)	
16	*A-1331-428-A	C BOARD, COMPLETE	
17	3-704-495-01	SPACER, DY	
18	*3-704-372-11	HOLDER, HV CABLE	
19	4-369-318-61	SPRING, TENSION	
20	⚠ 1-403-619-11	COIL, DEMAGNETIZATION	
21	4-043-827-11	BAND, DEGAUSSING COIL	
22	*4-042-988-01	HOLDER, DGC	
23	4-048-703-01	COVER, REAR	
24	4-049-130-01	CLAMP, CODE	
25	*4-048-690-01	RAIL (L), GUIDE	
26	*4-048-689-01	RAIL (R), GUIDE	
27	*A-1241-190-A	F1 BOARD, COMPLETE (KV-G25M1(RUSS))	
28	*4-049-158-01	BRACKET, F1 PC BOARD (KV-G25M1(RUSS))	
29	*A-1347-103-A	V1 BOARD, COMPLETE (KV-G25M11)	
30	*A-1292-869-A	A1 BOARD, COMPLETE	
31	⚠ 8-598-323-00	TUNER, BT-AG401	
32	1-900-212-02	LEAD ASSY, FOCUS	
33	⚠ 1-453-190-11	TRANSFORMER, FLYBACK (NX-2743//M3B)	
34	*A-1297-513-A	A BOARD, COMPLETE (KV-G25M1(ME))	
	*A-1297-552-A	A BOARD, COMPLETE (KV-G25M1(HK))	
	*A-1297-554-A	A BOARD, COMPLETE (KV-G25M1(RUSS))	
	*A-1297-566-A	A BOARD, COMPLETE (KV-G25M11)	
35	⚠ 4-389-778-11	HOLDER, AC CORD	
36	⚠ 1-574-062-22	CORD, POWER (WITH CONNECTOR) (2.5A/250V) (KV-G25M1(ME,HK))	
	⚠ 1-769-689-21	CORD, POWER (WITH CONNECTOR) (KV-G25M1(HK))	
37	1-452-032-00	MAGNET, DISC	
38	X-4387-214-1	PERMALOY ASSY, CORRECTION	
39	4-049-121-01	LABEL, TERMINAL	
40	4-049-416-01	SHEET, BLIND	
41	4-039-460-01	HOLDER, FBT	
42	*4-049-124-01	BRACKET, SPEAKER	
43	1-544-453-21	SPEAKER (2CM)	

ELECTRICAL PARTS LIST

A1

NOTE:

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

- Items marked " * " are not stocked since service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

RESISTORS
- All resistors are in ohms
- F : nonflammable

CAPACITORS
- MF : μF, PF : μμF

COILS
- MMH : μH, UH : μH

A1 A

REF.NO.	PART NO.	DESCRIPTION			REMARK
	*A-1292-869-A	A1 BOARD, COMPLETE			
		**********			
		<CAPACITOR>			
C1201	1-164-505-11	CERAMIC CHIP 2.2MF		16V	
C1202	1-104-665-11	ELECT 100MF	20%	16V	
C1203	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C1204	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C1205	1-164-505-11	CERAMIC CHIP 2.2MF		16V	
C1206	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C1207	1-126-157-11	ELECT 10MF	20%	16V	
C1208	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V	
C1209	1-104-664-11	ELECT 47MF	20%	16V	
C1210	1-124-234-00	ELECT 22MF	20%	16V	
C1211	1-104-664-11	ELECT 47MF	20%	16V	
C1212	1-164-505-11	CERAMIC CHIP 2.2MF		16V	
C1213	1-164-505-11	CERAMIC CHIP 2.2MF		16V	
C1214	1-124-907-11	ELECT 10MF	20%	50V	
C1215	1-124-907-11	ELECT 10MF	20%	50V	
C1216	1-104-664-11	ELECT 47MF	20%	16V	
C1217	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V	
C1218	1-104-664-11	ELECT 47MF	20%	16V	
C1219	1-164-505-11	CERAMIC CHIP 2.2MF		16V	
C1221	1-164-505-11	CERAMIC CHIP 2.2MF		16V	
C1222	1-104-664-11	ELECT 47MF	20%	16V	
C1223	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C1224	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C1225	1-164-505-11	CERAMIC CHIP 2.2MF		16V	
C1227	1-164-505-11	CERAMIC CHIP 2.2MF		16V	
		<FILTER>			
CF1201	1-527-943-00	FILTER, CERAMIC			
CF1202	1-567-101-11	FILTER, CERAMIC			
CF1203	1-567-099-00	FILTER, CERAMICO			
CF1204	1-567-100-00	FILTER, CERAMIC			
		<CONNECTOR>			
CN1201	*1-770-748-11	CONNECTOR, BOARD TO BOARD 12P			

REF.NO.	PART NO.	DESCRIPTION			REMARK
		<FERRITE BEAD>			
FB1201	1-412-911-11	INDUCTOR, FERRITE BEAD			
		<IC>			
IC1201	8-759-991-41	IC LM78L05ACZ			
IC1202	8-759-070-71	IC TDA9820			
IC1203	8-759-248-80	IC AN5262-(NT)			
IC1204	8-759-800-81	IC LA7016			
IC1205	8-752-057-18	IC CXA1315P			
		<TRANSISTOR>			
Q1201	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q1202	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q1203	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q1204	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
		<RESISTOR>			
R1201	1-216-049-00	METAL GLAZE 1K	5%	1/10W	
R1202	1-216-049-00	METAL GLAZE 1K	5%	1/10W	
R1203	1-216-043-91	METAL GLAZE 560	5%	1/10W	
R1204	1-216-043-91	METAL GLAZE 560	5%	1/10W	
R1205	1-216-043-91	METAL GLAZE 560	5%	1/10W	
R1206	1-216-043-91	METAL GLAZE 560	5%	1/10W	
R1207	1-216-059-00	METAL GLAZE 2.7K	5%	1/10W	
R1208	1-216-049-00	METAL GLAZE 1K	5%	1/10W	
R1209	1-216-049-00	METAL GLAZE 1K	5%	1/10W	
R1210	1-216-083-00	METAL GLAZE 27K	5%	1/10W	
R1211	1-216-065-00	METAL GLAZE 4.7K	5%	1/10W	
R1212	1-216-049-00	METAL GLAZE 1K	5%	1/10W	
R1213	1-216-049-00	METAL GLAZE 1K	5%	1/10W	
R1214	1-216-049-00	METAL GLAZE 1K	5%	1/10W	
R1215	1-216-097-00	METAL GLAZE 100K	5%	1/10W	
R1216	1-216-049-00	METAL GLAZE 1K	5%	1/10W	
R1217	1-216-097-00	METAL GLAZE 100K	5%	1/10W	
R1218	1-216-081-00	METAL GLAZE 22K	5%	1/10W	
R1219	1-216-081-00	METAL GLAZE 22K	5%	1/10W	
R1220	1-216-081-00	METAL GLAZE 22K	5%	1/10W	
R1221	1-216-081-00	METAL GLAZE 22K	5%	1/10W	
R1222	1-216-081-00	METAL GLAZE 22K	5%	1/10W	
R1223	1-216-081-00	METAL GLAZE 22K	5%	1/10W	
R1224	1-216-049-00	METAL GLAZE 1K	5%	1/10W	
R1225	1-216-017-00	METAL GLAZE 47	5%	1/10W	
R1226	1-216-081-00	METAL GLAZE 22K	5%	1/10W	
R1227	1-216-049-00	METAL GLAZE 1K	5%	1/10W	
R1228	1-216-049-00	METAL GLAZE 1K	5%	1/10W	
R1229	1-216-081-00	METAL GLAZE 22K	5%	1/10W	
R1230	1-216-081-00	METAL GLAZE 22K	5%	1/10W	
R1231	1-216-081-00	METAL GLAZE 22K	5%	1/10W	
		**********			
	*A-1297-513-A	A BOARD, COMPLETE (KV-G25M1(ME))			
	*A-1297-552-A	A BOARD, COMPLETE (KV-G25M1(HK))			
	*A-1297-554-A	A BOARD, COMPLETE (KV-G25M1(RUSS))			
	*A-1297-566-A	A BOARD, COMPLETE (KV-G25M11)			
		**********			
	1-533-223-11	CLIP, FUSE			
	*1-580-798-11	CONNECTOR PIN (DY) 6P			
	*4-049-131-01	CASE (A), SHIELD			
	4-382-854-11	SCREW (M3X10), P, SW (+)			
		<CAPACITOR>			
C001	1-163-011-11	CERAMIC CHIP 0.0015MF	10%	50V	
C002	1-124-916-11	ELECT 22MF	20%	50V	
C003	1-163-117-00	CERAMIC CHIP 100PF	5%	50V	
C004	1-124-925-11	ELECT 2.2MF	20%	50V	
C007	1-124-902-00	ELECT 0.47MF	20%	50V	
C008	1-163-117-00	CERAMIC CHIP 100PF	5%	50V	
C009	1-163-133-00	CERAMIC CHIP 470PF	5%	50V	
C010	1-163-037-11	CERAMIC CHIP 0.022MF	10%	25V	
C011	1-104-664-11	ELECT 47MF	20%	16V	
C012	1-163-117-00	CERAMIC CHIP 100PF	5%	50V	
C015	1-101-884-00	CERAMIC 56PF	5%	50V	
C016	1-101-884-00	CERAMIC 56PF	5%	50V	
C017	1-163-117-00	CERAMIC CHIP 100PF	5%	50V	
C018	1-163-117-00	CERAMIC CHIP 100PF	5%	50V	
C030	1-163-125-00	CERAMIC CHIP 220PF	5%	50V	
C031	1-124-903-11	ELECT 1MF	20%	50V	
C034	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C035	1-163-009-11	CERAMIC CHIP 0.001M	10	50V	
C036	1-163-009-11	CERAMIC CHIP 0.001M	10%	50V	
C039	1-163-117-00	CERAMIC CHIP 100PF	5%	50V	
C040	1-163-117-00	CERAMIC CHIP 100PF	5%	50V	
C041	1-130-491-00	MYLAR 0.047MF	5	50V	
C042	1-163-117-00	CERAMIC CHIP 100PF	5%	50V	
C043	1-163-001-11	CERAMIC CHIP 220PF	10%	50V	
C044	1-163-117-00	CERAMIC CHIP 100PF	5%	50V	
C046	1-163-117-00	CERAMIC CHIP 100PF	5%	50V	
C048	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C049	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C050	1-124-903-11	ELECT 1MF	20%	50V	
C052	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C055	1-126-941-11	ELECT 470MF	20%	16V	
C057	1-163-243-11	CERAMIC CHIP 47PF	5%	50V	
C072	1-126-941-11	ELECT 470MF	20%	16V	
C074	1-163-001-11	CERAMIC CHIP 220PF	10%	50V	

REF.NO.	PART NO.	DESCRIPTION			REMARK
C101	1-163-029-11	CERAMIC CHIP 0.0047MF		50V	
C102	1-136-169-00	FILM 0.22MF	5%	50V	
C105	1-104-665-11	ELECT 100MF	20%	16V	
C106	1-124-907-11	ELECT 10MF	20%	50V	
C107	1-163-117-00	CERAMIC CHIP 100PF	5%	50V	
C108	1-126-942-61	ELECT 1000MF	20%	16V	
C109	1-163-017-00	CERAMIC CHIP 0.0047MF	10%	50V	
C114	1-163-117-00	CERAMIC CHIP 100PF	5%	50V	
C115	1-163-093-00	CERAMIC CHIP 10PF	5%	50V	
C116	1-136-165-00	FILM 0.1MF	5%	50V	
C117	1-163-117-00	CERAMIC CHIP 100PF	5%	50V	
C118	1-124-916-11	ELECT 22MF	20%	50V	
C119	1-163-059-00	CERAMIC CHIP 0.01MF		50V	
C120	1-130-493-00	MYLAR 0.068MF	5%	50V	
C121	1-130-493-00	MYLAR 0.068MF	5%	50V	
C122	1-104-665-11	ELECT 100MF	20%	16V	
C124	1-163-029-11	CERAMIC CHIP 0.0047MF		50V	
C125	1-163-029-11	CERAMIC CHIP 0.0047MF		50V	
C234	1-104-664-11	ELECT 47MF	20%	16V	
C235	1-104-664-11	ELECT 47MF	20%	16V	
C236	1-126-968-11	ELECT 100MF	20%	35V	
C237	1-104-665-11	ELECT 100MF	20%	16V	
C238	1-136-167-00	FILM 0.15MF	5%	50V	
C241	1-124-557-11	ELECT 1000MF	20%	25V	
C242	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V	
C243	1-126-233-11	ELECT 22MF	20%	25V	
C244	1-124-557-11	ELECT 1000MF	20%	25V	
C253	1-104-665-11	ELECT 100MF	20%	16V	
C258	1-136-169-00	FILM 0.22MF	5%	50V	
C300	1-104-664-11	ELECT 47MF	20%	16V	
C301	1-163-249-11	CERAMIC CHIP 82PF	5%	50V	
C302	1-163-099-00	CERAMIC CHIP 18PF	5%	50V	
C303	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C304	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C305	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C306	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C307	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C308	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C309	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C310	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C311	1-163-097-00	CERAMIC CHIP 15PF	5%	50V	
C312	1-163-097-00	CERAMIC CHIP 15PF	5%	50V	
C313	1-104-665-11	ELECT 100MF	20%	16V	
C314	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V	
C315	1-165-320-11	CERAMIC CHIP 0.47MF	10%	16V	
C316	1-102-125-00	CERAMIC 0.0047MF	10%	50V	
C319	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C320	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C321	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C322	1-164-004-11	CERAMIC CHIP 0.1MF	10%	25V	
C323	1-163-109-00	CERAMIC CHIP 47PF	5%	50V	
C324	1-164-337-11	CERAMIC CHIP 2.2MF		16V	
C325	1-163-093-00	CERAMIC CHIP 10PF	5%	50V	
C326	1-163-095-00	CERAMIC CHIP 12PF	5%	50V	
C327	1-163-093-00	CERAMIC CHIP 10PF	5%	50V	
C329	1-163-016-00	CERAMIC CHIP 0.0039MF	10%	50V	

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The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION	REMARK
C1225	1-164-005-11	CERAMIC CHIP 0.47MF 25V	
C1226	1-124-120-11	ELECT 220MF 20% 16V	
C1229	1-216-295-00	CONDUCTOR, CHIP (2012)	
C1513	1-124-122-11	ELECT 100MF 20% 50V	
		<CONNECTOR>	
CN101	*1-560-124-00	PLUG, CONNECTOR (2.5MM) 4P	
CN103	*1-564-509-11	PLUG, CONNECTOR 6P	
CN104	*1-770-747-11	CONNECTOR, BOARD TO BOARD 12P	
CN106	*1-770-747-11	CONNECTOR, BOARD TO BOARD 12P (KV-G25M11)	
CN251	*1-564-507-11	PLUG, CONNECTOR 4P	
CN601	*1-580-843-11	PIN, CONNECTOR (POWER)	
CN602	*1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P	
CN603	*1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P	
CN851	*1-508-766-00	PIN, CONNECTOR (5MM PITCH) 4P	
		<TRIMMER>	
CT45	1-579-690-21	TRAP, CERAMIC	
CT55	1-404-801-11	TRAP, CERAMIC	
CT60	1-409-429-11	TRAP, CERAMIC	
CT65	1-409-327-00	TRAP, CERAMIC (6.5MHZ)	
		<DIODE>	
D001	8-719-109-81	DIODE RD4.7ESB2	
D002	8-719-911-19	DIODE 1SS119-25	
D003	8-719-041-97	DIODE MA113-(TX)	
D004	8-719-109-84	DIODE RD5.1ESB1	
D005	8-719-109-84	DIODE RD5.1ESB1	
D101	8-719-041-97	DIODE MA113-(TX)	
D102	8-719-109-81	DIODE RD4.7ESB2	
D103	8-719-914-42	DIODE DA204K	
D251	8-719-911-19	DIODE 1SS119-25	
D252	8-719-914-42	DIODE DA204K	
D301	8-719-041-97	DIODE MA113-(TX)	
D302	8-719-041-97	DIODE MA113-(TX)	
D303	8-719-041-97	DIODE MA113-(TX)	
D304	8-719-041-97	DIODE MA113-(TX)	
D305	8-719-041-97	DIODE MA113-(TX)	
D306	8-719-911-19	DIODE 1SS119-25	
D307	8-719-911-19	DIODE 1SS119-25	
D308	8-719-109-54	DIODE RD2.2ESB2	
D310	8-719-041-97	DIODE MA113-(TX)	
D311	8-719-109-68	DIODE RD3.6ESB1	
D312	8-719-110-08	DIODE RD8.2ESB2	
D313	8-719-041-97	DIODE MA113-(TX)	
D314	8-719-041-97	DIODE MA113-(TX)	
D351	8-719-908-03	DIODE GP08D	
D401	8-719-421-40	DIODE MA77	
D402	8-719-911-19	DIODE 1SS119-25	
D403	8-719-911-19	DIODE 1SS119-25	
D513	8-719-109-84	DIODE RD5.1ESB1	
D551	8-719-908-03	DIODE GP08D	
D561	8-719-911-19	DIODE 1SS119-25	
D591	8-719-911-19	DIODE 1SS119-25	
D601	8-719-052-84	DIODE RBV-406H-02	
D602	8-719-108-18	THYRISTOR 5P4M	
D603	8-719-112-87	DIODE RD13EST1B	
D604	8-719-110-36	DIODE RU4DS	
D605	8-719-052-52	DIODE 31DF2-FD5	
D606	8-719-052-52	DIODE 31DF2-FD5	
D607	8-719-510-26	DIODE D1NL20	
D609	8-719-510-26	DIODE D1NL20	
D610	8-719-510-26	DIODE D1NL20	
D611	8-719-510-26	DIODE D1NL20	
D801	8-719-945-80	DIODE ERC06-15S	
D802	8-719-900-26	DIODE ERD29-08J	
D851	8-719-302-43	DIODE EL1Z	
D852	8-719-028-72	DIODE RGP02-17EL-6433	
D853	8-719-302-43	DIODE EL1Z	
D855	8-719-302-43	DIODE EL1Z	
D857	8-719-908-03	DIODE GP08D	
D858	8-719-908-03	DIODE GP08D	
D860	8-719-911-19	DIODE 1SS119-25	
D891	8-719-945-80	DIODE ERC06-15S	
D901	8-719-054-60	DIODE LN0220022G	
D1201	8-719-121-24	DIODE RD9.1ESL	
D1202	8-719-121-24	DIODE RD9.1ESL	
D1207	8-719-121-24	DIODE RD9.1ESL	
D1208	8-719-121-24	DIODE RD9.1ESL	
D1504	8-719-911-19	DIODE 1SS119-25	
D1505	8-719-109-84	DIODE RD5.1ESB1	
		<FUSE>	
F601	⚠1-532-237-11	FUSE, TIME-LAG (BET) 3.15A/250V (KV-G25M1(ME)/(HK), KV-G25M11)	
		<FERRITE BEAD>	
FB101	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	
FB102	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	
FB251	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	
FB601	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	
FB603	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	
FB610	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	
FB611	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	
FB801	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH (KV-G25M1(ME)/(HK), KV-G25M11)	
FB801	1-420-872-00	COIL, AIR CORE (KV-G25M1(RUSS))	
		<IC>	
IC001	8-752-866-21	IC CXP85116B-615S	
IC002	8-759-805-37	IC L78LR05D-MA	
IC003	8-759-093-95	IC CAT24C04P	
IC004	8-741-790-11	ELEMENT,RAY-CATCHER SBX1790-11	
IC102	8-759-157-40	IC UPC574J	
IC203	8-759-336-30	IC TA8223K	
IC300	8-759-339-50	IC TDA8366N3D	
IC351	8-759-293-27	IC TDA4665	

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

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REF.NO.	PART NO.	DESCRIPTION				REMARK
C330	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C332	1-136-165-00	FILM	0.1MF	5%	50V	
C333	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C335	1-102-973-00	CERAMIC	100PF	5%	50V	
C337	1-124-916-11	ELECT	22MF	20%	50V	
C338	1-165-320-11	CERAMIC CHIP	0.47MF	10%	16V	
C339	1-163-121-00	CERAMIC CHIP	150PF	5%	50V	
C340	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V	
C342	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C344	1-124-907-11	ELECT	10MF	20%	50V	
C350	1-104-664-11	ELECT	47MF	20%	16V	
C351	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C352	1-164-222-11	CERAMIC CHIP	0.22MF		25V	
C358	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C359	1-104-665-11	ELECT	100MF	20%	16V	
367	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C368	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C369	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C370	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C374	1-124-910-11	ELECT	47MF	20%	50V	
C375	1-124-910-11	ELECT	47MF	20%	50V	
C402	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
C403	1-124-916-11	ELECT	22MF	20%	50V	
C405	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V	
C406	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V	
407	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V	
C408	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V	
C409	1-163-109-00	CERAMIC CHIP	47PF	5%	50V	
C410	1-163-103-00	CERAMIC CHIP	27PF	5%	50V	
C411	1-163-113-00	CERAMIC CHIP	68PF	5%	50V	
C412	1-163-113-00	CERAMIC CHIP	68PF	5%	50V	
C413	1-104-665-11	ELECT	100MF	20%	16V	
C414	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C415	1-163-017-00	CERAMIC CHIP	0.0047MF	10V	50V	
C416	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
417	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C418	1-216-295-00	CONDUCTOR, CHIP (2012)				
C419	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C420	1-104-664-11	ELECT	47MF	20%	16V	
C422	1-216-295-00	CONDUCTOR, CHIP (2012)				
C423	1-216-295-00	CONDUCTOR, CHIP	(2012)			
C424	1-216-295-00	CONDUCTOR, CHIP	(2012)			
C425	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
C501	1-102-228-00	CERAMIC	470PF	10%	500V	
C523	1-104-665-11	ELECT	100MF	20%	16V	
C548	1-106-220-00	MYLAR	0.1MF	10%	100V	
C551	1-126-968-11	ELECT	100MF	20%	35V	
C552	1-126-968-11	ELECT	100MF	20%	35V	
C553	1-163-019-00	CERAMIC CHIP	0.0068MF	10%	50V	
C554	1-102-244-00	CERAMIC	220PF	10%	500V	
C555	1-101-804-00	CERAMIC	10PF	5%	500V	
C562	1-104-665-11	ELECT	100MF	20%	16V	
601	1-162-318-11	CERAMIC	0.001MF	10%	500V	
C602	1-161-830-00	CERAMIC	0.0047MF	99%	500V	
C604	1-125-483-11	ELECT(BLOCK)	470MF	20%	400V	
C608	1-104-332-11	CERAMIC	470PF	10%	2KV	

REF.NO.	PART NO.	DESCRIPTION				REMARK
C609	1-126-600-11	ELECT	100MF	20%	160V	
C610	1-126-942-61	ELECT	1000MF	20%	16V	
C612	1-102-228-00	CERAMIC	470PF	10%	500V	
C613	1-102-824-00	CERAMIC	470PF	5%	50V	
C614	1-124-557-11	ELECT	1000MF	20%	25V	
C615	⚠1-164-497-51	CERAMIC	470PF	10%	400V	
C616	1-102-228-00	CERAMIC	470PF	10%	500V	
C620	1-136-619-11	FILM	0.0016MF	3%	2KV	
C621	⚠1-136-548-13	FILM	0.1MF	20%	250V	
C622	1-106-383-00	MYLAR	0.047MF	10%	200V	
C623	1-124-120-11	ELECT	220MF	20%	16V	
C624	1-126-942-61	ELECT	1000MF	20%	16V	
C625	1-102-074-00	CERAMIC	0.001MF	10%	50V	
C630	⚠1-164-497-51	CERAMIC	470PF	10%	400V	
C631	1-161-830-00	CERAMIC	0.0047MF	99%	500V	
C801	1-123-024-21	ELECT	33MF		160V	
C802	1-106-367-00	MYLAR	0.01MF	10%	200V	
C804	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V	
C805	1-102-244-00	CERAMIC	220PF	10%	500V	
C806	1-124-903-11	ELECT	1MF	20%	50V	
C807	1-136-540-11	FILM	0.82MF	5%	200V	
C808	1-130-959-00	FILM	0.047MF	10%	400V	
C809	1-162-115-00	CERAMIC	330PF	10%	2KV	
C810	1-106-365-00	MYLAR	0.0082MF	99%	200V	
C811	1-162-318-11	CERAMIC	0.001M	10%	500V	
C812	1-136-617-11	FILM	0.019M	3%	2KV	
C816	1-123-947-00	ELECT	10MF	20%	160V	
C820	1-162-135-11	CERAMIC	560PF	10%	2KV	
C821	1-106-391-12	MYLAR	0.1MF	10%	200V	
C822	1-136-541-11	FILM	1.5MF	5%	200V	
C823	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
C825	1-106-367-00	MYLAR	0.01MF	10%	200V	
C850	1-124-480-11	ELECT	470MF	20%	25V	
C852	1-104-574-11	CERAMIC	0.0047MF	10	2KV	
C853	1-162-318-11	CERAMIC	0.001MF	10%	500V	
C854	1-124-480-11	ELECT	470MF	20%	25V	
C856	1-162-318-11	CERAMIC	0.001MF	10%	500V	
C857	1-130-493-00	MYLAR	0.068MF	5%	50V	
C860	1-102-228-00	CERAMIC	470PF	10%	500V	
C861	1-107-654-11	ELECT	33MF	20%	250V	
C875	1-124-910-11	ELECT	47MF	20%	50V	
C876	1-108-702-11	MYLAR	0.068MF	10%	100V	
C891	1-163-007-11	CERAMIC CHIP	680PF	10%	50V	
C898	1-106-379-12	MYLAR	0.033MF	10%	100V	
C901	1-163-133-00	CERAMIC CHIP	470PF	5%	50V	
C902	1-163-133-00	CERAMIC CHIP	470PF	5%	50V	
C1201	1-104-665-11	ELECT	100MF	20%	16V	
C1202	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C1204	1-104-665-11	ELECT	100MF	20%	16V	
C1205	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C1210	1-104-665-11	ELECT	100MF	20%	16V	
C1213	1-124-903-11	ELECT	1MF	20%	50V	
C1214	1-124-907-11	ELECT	10MF	20%	50V	
C1217	1-104-665-11	ELECT	100MF	20%	16V	
C1218	1-163-123-00	CERAMIC CHIP	180PF	5%	50V	
C1221	1-164-005-11	CERAMIC CHIP	0.47MF		25V	

MC-Service

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REF.NO.	PART NO.	DESCRIPTION				REMARK
R021	1-216-065-00	METAL GLAZE	4.7K	5	1/10W	
R027	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R028	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R029	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R030	1-216-085-00	METAL GLAZE	33K	5%	1/10W	
R031	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R033	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R035	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R036	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R038	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R040	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R041	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R042	1-216-039-00	METAL GLAZE	390	5%	1/10W	
R043	1-216-079-00	METAL GLAZE	18K	5%	1/10W	
R044	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R046	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R047	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R048	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R049	1-216-121-00	METAL GLAZE	1M	5%	1/10W	
R050	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R051	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R052	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R054	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R057	1-216-049-00	METAL GLAZE	1K	5	1/10W	
R059	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R067	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R068	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R071	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R076	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R077	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R090	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R101	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R102	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R103	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R113	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R114	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R115	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R116	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R117	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R118	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R119	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W	
R120	1-216-109-00	METAL GLAZE	330K	5%	1/10W	
R131	1-216-464-11	METAL OXIDE	18K	5%	2W	F
R180	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R181	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R182	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R242	1-216-043-91	METAL GLAZE	560	5%	1/10W	
R243	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R244	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R245	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W	
R250	1-216-295-00	CONDUCTOR, CHIP (2012)				
R251	1-216-295-00	CONDUCTOR, CHIP (2012)				
R252	1-249-411-11	CARBON	330	5%	1/4W	
R253	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R254	1-249-389-11	CARBON	4.7	5%	1/4W	
R265	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R266	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R301	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R302	1-216-035-00	METAL GLAZE	270	5%	1/10W	
R303	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R304	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R305	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R306	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R307	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R308	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R309	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R310	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R311	1-216-075-00	METAL GLAZE	12K	5%	1/10W	
R312	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R313	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R314	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R315	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R316	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	(KV-G25M11)
R317	1-216-049-00	METAL GLAZE	1K	5%	1/10W	(KV-G25M11)
R318	1-216-099-00	METAL GLAZE	120K	5%	1/10W	
R319	1-216-109-00	METAL GLAZE	330K	5%	1/10W	
R320	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R321	1-216-689-11	METAL CHIP	39K	0.50%	1/10W	
R322	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R324	1-216-121-00	METAL GLAZE	1M	5%	1/10W	
R327	1-216-025-00	METAL GLAZE	100	5%	1/10W	(KV-G25M11)
R327	1-216-295-00	CONDUCTOR, CHIP (2012)				(KV-G25M1)
R328	1-216-025-00	METAL GLAZE	100	5%	1/10W	(KV-G25M11)
R328	1-216-295-00	CONDUCTOR, CHIP (2012)				(KV-G25M1)
R329	1-216-025-00	METAL GLAZE	100	5%	1/10W	(KV-G25M11)
R329	1-216-295-00	CONDUCTOR, CHIP (2012)				(KV-G25M1)
R330	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R332	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R334	1-216-041-00	METAL GLAZE	470	5%	1/10W	(KV-G25M11)
R335	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R336	1-216-077-00	METAL GLAZE	15K	5%	1/10W	
R338	1-216-043-91	METAL GLAZE	560	5%	1/10W	
R339	1-216-036-00	METAL GLAZE	300	5%	1/10W	
R340	1-216-035-00	METAL GLAZE	270	5%	1/10W	
R341	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R351	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R355	1-216-001-00	METAL GLAZE	10	5%	1/10W	
R356	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R403	1-216-021-00	METAL GLAZE	68	5%	1/10W	
R406	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R407	1-216-063-00	METAL GLAZE	3.9K	5%	1/10W	
R408	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W	
R409	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R410	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R411	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R412	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W	
R413	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

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REF.NO.	PART NO.	DESCRIPTION	REMARK
IC354	8-759-251-56	IC TDA8395T	
IC401	8-759-800-65	IC LA7910	
IC521	8-759-195-63	IC PQ09RE11	
IC551	8-759-801-98	IC LA7830	
IC601	8-749-010-84	IC STR-S6708	
IC602	8-749-920-61	IC SE-135N	
IC603	⚠ 8-749-010-64	PHOTO COUPLER PC123F2	
IC801	8-759-100-96	IC UPC4558G2	
IC1210	8-759-100-96	IC UPC4558G2	
		<JACK>	
J251	1-770-785-11	JACK	
J1201	1-770-660-11	JACK BLOCK, PIN 4P	
J1202	1-695-238-11	JACK BLOCK, PIN 2P	
		<CHIP CONDUCTOR>	
JR102	1-216-295-00	CONDUCTOR, CHIP (2012)	
JR103	1-216-295-00	CONDUCTOR, CHIP (2012)	(KV-G25M11)
JR104	1-216-295-00	CONDUCTOR, CHIP (2012)	
		<COIL>	
L002	1-410-470-11	INDUCTOR 10UH	
L003	1-408-411-00	INDUCTOR 15UH	
L101	1-410-396-41	FERRITE BEAD INDUCTOR 0.45UH	
L301	1-408-609-41	INDUCTOR 33UH	
L401	1-410-498-11	INDUCTOR 1.2UH	
L402	1-410-510-11	INDUCTOR 12UH	
L403	1-410-510-11	INDUCTOR 12UH	
L404	1-410-508-11	INDUCTOR 8.2UH	
L405	1-410-508-11	INDUCTOR 8.2UH	
L406	1-410-507-11	INDUCTOR 6.8UH	
L407	1-410-511-11	INDUCTOR 15UH	
L408	1-535-303-00	LEAD, JUMPER (5.0MM)	
L409	1-535-303-00	LEAD, JUMPER (5.0MM)	
L410	1-535-303-00	LEAD, JUMPER (5.0MM)	
L411	1-535-303-00	LEAD, JUMPER (5.0MM)	
L802	1-412-527-11	INDUCTOR 15UH	
L804	1-459-075-00	COIL, DYNAMIC CONVERSION CHOKE	
L805	1-459-907-11	COIL, HORIZONTAL LINEARITY	
L807	1-459-390-00	COIL (WITH CORE)	
L808	1-412-553-11	INDUCTOR 3.3MMH	
L821	1-459-111-00	COIL, DRAM CORE (CDI)	
L850	1-408-947-00	INDUCTOR 2.2MMH	
		<TRANSISTOR>	
Q030	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q031	8-729-216-22	TRANSISTOR 2SA1162-G	
Q108	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q109	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q110	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q202	8-729-216-22	TRANSISTOR 2SA1162-G	
Q207	8-729-216-22	TRANSISTOR 2SA1162-G	
Q208	8-729-901-01	TRANSISTOR DTC144EK	
Q210	8-729-900-98	TRANSISTOR DTC143TK	
Q301	8-729-900-53	TRANSISTOR DTC114EK	
Q302	8-729-120-28	TRANSISTOR 2SC1623-L5L6	(KV-G25M11)
Q303	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q402	8-729-922-66	TRANSISTOR 2SC2410SN	
Q403	8-729-900-98	TRANSISTOR DTC143TK	
Q404	8-729-900-98	TRANSISTOR DTC143TK	
Q405	8-729-216-22	TRANSISTOR 2SA1162-G	
Q406	8-729-216-22	TRANSISTOR 2SA1162-G	
Q407	8-729-216-22	TRANSISTOR 2SA1162-G	
Q408	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q409	8-729-216-22	TRANSISTOR 2SA1162-G	
Q410	8-729-216-22	TRANSISTOR 2SA1162-G	
Q411	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q412	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q413	8-729-900-98	TRANSISTOR DTC143TK	
Q414	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q415	8-729-900-98	TRANSISTOR DTC143TK	
Q416	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q417	8-729-900-98	TRANSISTOR DTC143TK	
Q418	8-729-900-98	TRANSISTOR DTC143TK	
Q561	8-729-200-17	TRANSISTOR 2SA1091-O	
Q601	8-729-120-28	TRANSISTOR 2SC2412K	
Q801	8-729-140-96	TRANSISTOR 2SD774-34	
Q802	8-729-016-32	TRANSISTOR 2SC4927-01	
Q821	8-729-018-99	TRANSISTOR 2SD2394-F	
Q902	8-729-901-01	TRANSISTOR DTC144EK	
Q903	8-729-901-01	TRANSISTOR DTC144EK	
Q1201	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q1202	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q1203	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q1204	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1207	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q1208	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q1265	8-729-900-98	TRANSISTOR DTC143TK	
Q1513	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
		<RESISTOR>	
R001	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R002	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R003	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R004	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R007	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R008	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R009	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R010	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R012	1-216-017-00	METAL GLAZE 47 5% 1/10W	
R013	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R014	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R015	1-216-043-91	METAL GLAZE 560 5% 1/10W	
R018	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R019	1-216-101-00	METAL GLAZE 150K 5% 1/10W	
R020	1-216-025-00	METAL GLAZE 100 5% 1/10W	(KV-G25M11)

MC-Service

A C

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION				REMARK
R910	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R911	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W	
R913	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R914	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R915	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W	
R1201	1-216-023-00	METAL GLAZE	82	5%	1/10W	
R1202	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1203	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R1205	1-216-023-00	METAL GLAZE	82	5%	1/10W	
R1206	1-216-089-00	METAL GLAZE	47K	5%	1/10W	
R1211	1-216-021-00	METAL GLAZE	68	5%	1/10W	
R1212	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1215	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R1216	1-216-113-00	METAL GLAZE	470K	5%	1/10W	
R1218	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R1219	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1220	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1221	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1227	1-216-689-11	METAL GLAZE	39K	5%	1/10W	
R1228	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1229	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R1230	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1231	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1232	1-216-063-00	METAL GLAZE	3.9K	5%	1/10W	
R1233	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R1235	1-216-689-11	METAL GLAZE	39K	5%	1/10W	
R1239	1-249-389-11	CARBON	4.7	5%	1/4W	F
R1240	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1241	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R1243	1-216-025-00	METAL GLAZE	100	5%	1/10W	
R1245	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R1246	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R1247	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R1248	1-216-051-00	METAL GLAZE	1.2K	5%	1/10W	
R1249	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R1513	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R1514	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R1515	1-216-025-00	METAL GLAZE	100	5%	1/10W	

<SWITCH>

S601	⚠1-762-087-11	SWITCH, PUSH (AC POWER)
S801	1-572-707-11	SWITCH, LEVER
S901	1-570-577-11	SWITCH, PUSH
S902	1-570-577-11	SWITCH, PUSH
S903	1-570-577-11	SWITCH, PUSH
S904	1-570-577-11	SWITCH, PUSH
S905	1-570-577-11	SWITCH, PUSH

<SPARK GAP>

SG801	1-519-422-11	GAP, SPARK

<FILTER>

SWF401	1-760-771-11	FILTER, SURFACE WAVE

REF.NO.	PART NO.	DESCRIPTION	REMARK

<TRANSFORMER>

T601	⚠1-429-139-11	TRANSFORMER, CONVERTER (SRT)
T605	⚠1-424-461-11	TRANSFORMER, LINE FILTER
T801	1-437-195-11	TRANSFORMER, HORIZONTAL DRIVE
T851	⚠1-453-190-11	TRANSFORMER ASSY, FLYBACK (NX-2743//M3B)

<THERMISTOR>

THP601	⚠1-810-961-11	THERMISTOR, POSITIVE

<TUNER>

TU101	⚠8-598-323-00	TUNER BT-AG401

<CRYSTAL>

X101	1-577-082-11	VIBRATOR, CERAMIC
X300	1-404-835-31	COIL, IF
X358	1-567-505-11	OSCILLATOR, CRYSTAL
X443	1-567-504-11	OSCILLATOR, CRYSTAL

****

*A-1331-428-A C BOARD, COMPLETE
****

<CAPACITOR>

C701	1-162-114-00	CERAMIC	0.0047MF	2KV	
C702	1-102-074-00	CERAMIC	0.001MF	10%	50V
C704	1-130-202-00	FILM	0.022MF	5%	400V
C708	1-102-114-00	CERAMIC	470PF	10%	50V
C709	1-102-114-00	CERAMIC	470PF	10%	50V
C710	1-102-114-00	CERAMIC	470PF	10%	50V
C712	1-101-361-00	CERAMIC	150PF	5%	50V
C713	1-102-971-00	CERAMIC	82PF	5%	50V
C714	1-101-361-00	CERAMIC	150PF	5%	50V
C716	1-124-122-11	ELECT	100MF	20%	50V

<CONNECTOR>

CN701	*1-508-766-00	PIN, CONNECTOR (5MM PITCH) 4P
CN703	*1-564-509-11	PLUG, CONNECTOR 6P
CN704	1-695-915-11	TAB (CONTACT)

<DIODE>

D701	8-719-911-19	DIODE 1SS119-25
D702	8-719-911-19	DIODE 1SS119-25
D703	8-719-911-19	DIODE 1SS119-25
D704	8-719-911-19	DIODE 1SS119-25
D705	8-719-911-19	DIODE 1SS119-25
D706	8-719-911-19	DIODE 1SS119-25
D707	8-719-911-19	DIODE 1SS119-25
D708	8-719-911-19	DIODE 1SS119-25
D709	8-719-911-19	DIODE 1SS119-25
D710	8-719-911-19	DIODE 1SS119-25

The components identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

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REF. NO.	PART NO.	DESCRIPTION				REMARK
R414	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R415	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R416	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R417	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R418	1-216-045-00	METAL GLAZE	680	5%	1/10W	
R419	1-216-049-00	METAL GLAZE	1K	5	1/10W	
R420	1-216-039-00	METAL GLAZE	390	5%	1/10W	
R421	1-216-033-00	METAL GLAZE	220	5%	1/10W	
R422	1-216-027-00	METAL GLAZE	120	5%	1/10W	
R423	1-216-029-00	METAL GLAZE	150	5%	1/10W	
R424	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R425	1-216-039-00	METAL GLAZE	390	5%	1/10W	
R426	1-216-029-00	METAL GLAZE	150	5%	1/10W	
R427	1-216-037-00	METAL GLAZE	330	5%	1/10W	
R428	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R429	1-216-039-00	METAL GLAZE	390	5%	1/10W	
R430	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R431	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R432	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R433	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R434	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R435	1-216-041-00	METAL GLAZE	470	5%	1/10W	
R436	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R437	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R440	1-216-029-00	METAL GLAZE	150	5%	1/10W	
R441	1-216-021-00	METAL GLAZE	68	5%	1/10W	
R521	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R552	1-216-105-91	METAL GLAZE (KV-G25M1 (RUSS)/(HK),KV-G25M11)	220K	5%	1/10W	
R553	1-216-295-00	CONDUCTOR, CHIP (2012) (KV-G25M1 (RUSS)/(HK),KV-G25M11)				
R555	1-249-429-11	CARBON	10K	5%	1/4W	
R556	1-216-049-00	METAL GLAZE	1K	5	1/10W	
R557	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W	
R560	1-216-295-00	CONDUCTOR, CHIP (2012)				
R561	1-249-421-11	CARBON	2.2K	5%	1/4W	
R562	1-249-420-11	CARBON	1.8K	5%	1/4W	F
R563	1-247-885-00	CARBON	180K	5%	1/4W	
R564	1-216-091-00	METAL GLAZE	56K	5%	1/10W	
R565	1-216-091-00	METAL GLAZE	56K	5%	1/10W	
R566	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R569	1-247-883-00	CARBON	150K	5%	1/4W	
R570	1-216-295-00	CONDUCTOR, CHIP (2012) (KV-G25M1(RUSS)/(HK), KV-G25M11)				
R603	1-249-416-11	CARBON	820	5%	1/4W	F
R604	1-249-416-11	CARBON	820	5%	1/4W	F
R606	1-215-915-11	METAL OXIDE	470	5%	3W	F
R608	1-535-303-00	LEAD, JUMPER (5.0MM)				
R609	1-249-381-11	CARBON	1	5%	1/4W	
R610	1-215-924-00	METAL OXIDE	15K	5%	3W	F
R611	1-202-933-61	FUSIBLE	0.1	10%	1/2W	F
R612	1-249-377-11	CARBON	0.47	5%	1/4W	F
R613	1-249-377-11	CARBON	0.47	5%	1/4W	F
R614	1-215-877-11	METAL OXIDE	22K	5%	1W	F
R615	1-249-389-11	CARBON	4.7	5%	1/4W	
R616	⚠1-218-265-91	METAL	8.2M	5%	1W	

REF. NO.	PART NO.	DESCRIPTION				REMARK
R617	1-215-924-00	METAL OXIDE	15K	5%	3W	F
R619	1-249-377-11	CARBON	0.47	5%	1/4W	F
R621	1-211-748-11	FUSIBLE	5.6	5%	5W	F
R622	1-217-190-21	WIREWOUND	0.15	10%	2W	F
R623	1-247-807-31	CARBON	100	5%	1/4W	
R624	1-215-881-11	METAL OXIDE	15	5%	2W	F
R625	1-249-424-11	CARBON	3.9K	5%	1/4W	
R626	1-249-420-11	CARBON	1.8K	5%	1/4W	
R627	1-249-417-11	CARBON	1K	5%	1/4W	
R628	1-249-417-11	CARBON	1K	5%	1/4W	
R629	1-249-401-11	CARBON	47	5%	1/4W	
R635	1-215-882-00	METAL OXIDE	22	5% (KV-G25M11)	2W	F
R636	1-215-924-00	METAL OXIDE	15K	5%	3W	F
R801	1-215-920-11	METAL OXIDE	3.3K	5%	3W	F
R802	1-249-387-11	CARBON	3.3	5%	1/4W	F
R804	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R805	1-216-081-00	METAL GLAZE	22K	5%	1/10W	
R808	1-535-303-00	LEAD, JUMPER (5.0MM)				
R809	1-247-756-11	CARBON	2.2K	5%	1/2W	F
R811	1-216-346-00	METAL OXIDE	0.56	5%	1W	F
R812	1-216-075-00	METAL GLAZE	12K	5%	1/10W	
R816	1-249-430-11	CARBON	12K	5%	1/4W	
R820	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R821	1-215-910-00	METAL OXIDE	68	5%	3W	F
R822	1-216-429-00	METAL OXIDE	270	5%	1W	F
R823	1-247-756-11	CARBON	2.2K	5%	1/2W	F
R825	1-249-392-11	CARBON	8.2	5%	1/4W	F
R826	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	
R827	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R828	1-216-063-00	METAL GLAZE	3.9K	5%	1/10W	
R829	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W	
R831	1-216-426-11	METAL OXIDE	82	5%	1W	F
R832	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W	
R834	1-216-073-00	METAL GLAZE	10K	5%	1/10W	
R851	1-249-382-11	CARBON	1.2	5%	1/4W	F
R852	1-249-923-11	CARBON	1K	5%	1/4W	F
R853	1-249-377-11	CARBON	0.47	5%	1/4W	F
R854	1-249-377-11	CARBON	0.47	5%	1/4W	F
R855	1-202-818-00	SOLID	1K	20%	1/2W	
R856	1-249-425-11	CARBON	4.7K	5%	1/4W	
R857	1-249-438-11	CARBON	56K	5%	1/4W	
R858	1-216-370-11	METAL OXIDE	1.2	5%	2W	FZ
R860	1-247-887-00	CARBON	220K	5%	1/4W	
R881	1-216-043-91	METAL GLAZE	560	5%	1/10W	
R882	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W	
R883	1-216-121-00	METAL GLAZE	1M	5%	1/10W	
R895	1-216-348-00	METAL OXIDE	0.82	5%	1W	F
R898	1-249-421-11	CARBON	2.2K	5%	1/4W	
R902	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R904	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W	
R905	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R906	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R907	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W	
R908	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W	
R909	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	

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The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION	REMARK
		<TRANSFORMER>	
T1601	⚠1-424-436-11	TRANSFORMER, LINE FILTER	
T1602	⚠1-424-436-11	TRANSFORMER, LINE FILTER	
**********			
	*A-1347-103-A	V1 BOARD, COMPLETE (KV-G25M11)	
		**********	
		<CAPACITOR>	
C01	1-163-037-11	CERAMIC CHIP 0.022MF 10% 25V	
C02	1-124-907-11	ELECT 10MF 20% 50V	
C03	1-163-037-11	CERAMIC CHIP 0.022MF 10% 25V	
C04	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C05	1-124-907-11	ELECT 10MF 20% 50V	
C06	1-163-227-11	CERAMIC CHIP 10PF 0.5PF 50V	
C07	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V	
C08	1-163-097-00	CERAMIC CHIP 15PF 5% 50	
C09	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C10	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C11	1-164-346-11	CERAMIC CHIP 1MF 16V	
C12	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C13	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V	
C14	1-216-295-00	CONDUCTOR, CHIP (2012)	
C15	1-124-482-11	ELECT 33MF 20% 35V	
C16	1-126-963-11	ELECT 4.7MF 20% 50V	
C17	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C19	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C22	1-124-907-11	ELECT 10MF 20% 50V	
C23	1-163-038-00	CERAMIC CHIP 0.1MF 25V	
C25	1-124-907-11	ELECT 10MF 20% 50V	
C26	1-124-119-00	ELECT 330MF 20% 16V	
C27	1-104-665-11	ELECT 100MF 20% 16V	
C28	1-163-099-00	CERAMIC CHIP 18PF 5% 50V	
C29	1-163-099-00	CERAMIC CHIP 18PF 5% 50V	
C30	1-163-099-00	CERAMIC CHIP 18PF 5% 50V	
C31	1-163-099-00	CERAMIC CHIP 18PF 5% 50V	
		<CONNECTOR>	
CN01	*1-770-748-11	CONNECTOR, BOARD TO BOARD 12P	
		<DIODE>	
D001	8-719-105-51	DIODE RD3.6M-B1	
D03	8-719-914-43	DIODE DAN202K	
D04	8-719-105-91	DIODE RD5.6M-B2	
D05	8-719-914-44	DIODE DAP202K	
D06	8-719-914-43	DIODE DAN202K	
		<FERRITE BEAD>	
FB01	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	

REF.NO.	PART NO.	DESCRIPTION	REMARK
		<IC>	
IC01	8-759-324-28	IC P83C654	
IC02	8-759-298-63	IC SAA5281ZP/E	
		<CHIP CONDUCTOR>	
JR02	1-216-295-00	CONDUCTOR, CHIP (2012)	
JR03	1-216-295-00	CONDUCTOR, CHIP (2012)	
JR04	1-216-295-00	CONDUCTOR, CHIP (2012)	
JR07	1-216-295-00	CONDUCTOR, CHIP (2012)	
JR08	1-216-295-00	CONDUCTOR, CHIP (2012)	
		<COIL>	
L01	1-410-464-11	INDUCTOR 3.3UH	
L03	1-410-464-11	INDUCTOR 3.3UH	
L04	1-410-464-11	INDUCTOR 3.3UH	
L05	1-410-464-11	INDUCTOR 3.3UH	
L06	1-410-464-11	INDUCTOR 3.3UH	
		<TRANSISTOR>	
Q01	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q02	8-729-900-53	TRANSISTOR DTC114EK	
Q03	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q04	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q05	8-729-216-22	TRANSISTOR 2SA1162-G	
Q06	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q07	8-729-019-01	TRANSISTOR 2SD2394-EF	
Q08	8-729-140-96	TRANSISTOR 2SD774-34	
Q09	8-729-901-04	TRANSISTOR DTA114EK	
		<RESISTOR>	
R01	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W	
R02	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R03	1-216-085-00	METAL GLAZE 33K 5% 1/10W	
R04	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R05	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R06	1-216-075-00	METAL GLAZE 12K 5% 1/10W	
R07	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R08	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R09	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R10	1-216-083-00	METAL GLAZE 27K 5% 1/10W	
R11	1-216-069-00	METAL GLAZE 6.8K 5% 1/10W	
R12	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R13	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W	
R16	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R17	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R18	1-216-059-00	METAL GLAZE 2.7K 5% 1/10W	
R19	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R20	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R21	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R22	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R24	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R25	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R26	1-216-049-00	METAL GLAZE 1K 5% 1/10W	

MC-Service

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

C F1

REF.NO.	PART NO.	DESCRIPTION				REMARK
D711	8-719-911-19	DIODE 1SS119-25				
D712	8-719-911-19	DIODE 1SS119-25				
D716	8-719-911-19	DIODE 1SS119-25				
D717	8-719-121-24	DIODE RD9.1ESL				
		<JACK>				
J701	⚠1-251-239-21	SOCKET, CRT				
		<COIL>				
L701	1-410-667-31	INDUCTOR	22UH			
L702	1-535-303-00	LEAD, JUMPER	(5.0MM)			
L703	1-408-609-41	INDUCTOR	33UH			
L704	1-535-303-00	LEAD, JUMPER	(5.0MM)			
L705	1-408-609-41	INDUCTOR	33UH			
L706	1-535-303-00	LEAD, JUMPER	(5.0MM)			
L707	1-408-609-41	INDUCTOR	33UH			
		<TRANSISTOR>				
Q701	8-729-326-11	TRANSISTOR	2SC2611			
Q702	8-729-326-11	TRANSISTOR	2SC2611			
Q703	8-729-326-11	TRANSISTOR	2SC2611			
Q704	8-729-326-11	TRANSISTOR	2SC2611			
Q705	8-729-326-11	TRANSISTOR	2SC2611			
Q706	8-729-326-11	TRANSISTOR	2SC2611			
Q707	8-729-200-17	TRANSISTOR	2SA1091-O			
Q708	8-729-200-17	TRANSISTOR	2SA1091-O			
Q709	8-729-200-17	TRANSISTOR	2SA1091-O			
Q710	8-729-119-78	TRANSISTOR	2SC2785-HFE			
Q711	8-729-119-78	TRANSISTOR	2SC2785-HFE			
Q712	8-729-119-78	TRANSISTOR	2SC2785-HFE			
Q714	8-729-255-12	TRANSISTOR	2SC2551-O			
		<RESISTOR>				
R701	1-244-941-00	CARBON	680K	5%	1/2W	
R702	1-249-496-11	CARBON	100K	5%	1/2W	
R703	1-249-496-11	CARBON	100K	5%	1/2W	
R705	1-216-392-11	METAL OXIDE	1.8	5%	3W	F
R710	1-215-899-11	METAL OXIDE	15K	5%	2W	F
R711	1-247-758-11	CARBON	3.3K	5%	1/2W	
R712	1-215-899-11	METAL OXIDE	15K	5%	2W	F
R713	1-247-758-11	CARBON	3.3K	5%	1/2W	
R714	1-215-899-11	METAL OXIDE	15K	5%	2W	F
R715	1-247-758-11	CARBON	3.3K	5%	1/2W	
R716	1-249-899-11	CARBON	100	5%	1/4W	F
R717	1-249-405-11	CARBON	100	5%	1/4W	F
R718	1-249-899-11	CARBON	100	5%	1/4W	F
R719	1-215-487-00	METAL	560K	1%	1/4W	
R720	1-249-417-11	CARBON	1K	5%	1/4W	F
R721	1-215-491-00	METAL	820K	1%	1/4W	
R722	1-249-923-11	CARBON	1K	5%	1/4W	F
R723	1-215-489-00	METAL	680K	1%	1/4W	
R724	1-249-417-11	CARBON	1K	5%	1/4W	F
R725	1-249-422-11	CARBON	2.7K	5%	1/4W	

REF.NO.	PART NO.	DESCRIPTION				REMARK
R726	1-249-422-11	CARBON	2.7K	5%	1/4W	
R727	1-249-422-11	CARBON	2.7K	5%	1/4W	
R728	1-215-410-00	METAL	360	1%	1/4W	
R729	1-215-410-00	METAL	360	1%	1/4W	
R730	1-215-410-00	METAL	360	1%	1/4W	
R731	1-535-303-00	LEAD, JUMPER	(5.0MM)			
R732	1-535-303-00	LEAD, JUMPER	(5.0MM)			
R733	1-535-303-00	LEAD, JUMPER	(5.0MM)			
R734	1-247-739-11	CARBON	100	5%	1/2W	
R738	1-247-807-31	CARBON	100	5%	1/4W	
R739	1-247-807-31	CARBON	100	5%	1/4W	
R740	1-247-807-31	CARBON	100	5%	1/4W	
R747	1-216-489-11	METAL OXIDE	27K	5%	3W	F
R749	1-216-490-11	METAL OXIDE	39K	5%	3W	F
R751	1-215-926-00	METAL OXIDE	33K	5%	3W	F
R753	1-249-429-11	CARBON	10K	5%	1/4W	
R755	1-249-427-11	CARBON	6.8K	5%	1/4W	
R756	1-249-427-11	CARBON	6.8K	5%	1/4W	
R757	1-249-427-11	CARBON	6.8K	5%	1/4W	
R758	1-249-419-11	CARBON	1.5K	5%	1/4W	
R759	1-249-419-11	CARBON	1.5K	5%	1/4W	
R760	1-249-419-11	CARBON	1.5K	5%	1/4W	F
		<VARIABLE RESISTOR>				
RV701	1-230-641-11	RES, ADJ, METAL GLAZE	2.2M			

****

*A-1241-190-A F1 BOARD, COMPLETE (KV-G25M1(RUSS)
****

1-533-223-11 CLIP, FUSE

<CAPACITOR>

C1601 ⚠1-104-706-51 FILM 0.22MF 20% 250V

<CONNECTOR>

CN1601 *1-580-843-11 PIN, CONNECTOR (POWER)
CN1602 *1-580-843-11 PIN, CONNECTOR (POWER)

<FUSE>

F1601 ⚠1-532-465-31 FUSE, TIME-LAG (BET) 3.15A/250V

<RESISTOR>

R1601 ⚠1-202-916-91 SOLID 5.6M 20% 1/2W

MC-Service

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

V1

REF.NO.	PART NO.	DESCRIPTION			REMARK
R27	1-216-071-00	METAL GLAZE	8.2K	5% 1/10W	
R28	1-216-025-00	METAL GLAZE	100	5% 1/10W	
R29	1-216-025-00	METAL GLAZE	100	5% 1/10W	
R30	1-216-071-00	METAL GLAZE	8.2K	5% 1/10W	
R31	1-216-025-00	METAL GLAZE	100	5% 1/10W	
R32	1-216-071-00	METAL GLAZE	8.2K	5% 1/10W	
R33	1-216-065-00	METAL GLAZE	4.7K	5% 1/10W	
R34	1-216-065-00	METAL GLAZE	4.7K	5% 1/10W	
R35	1-216-065-00	METAL GLAZE	4.7K	5% 1/10W	
R36	1-216-025-00	METAL GLAZE	100	5% 1/10W	
R37	1-216-049-00	METAL GLAZE	1K	5% 1/10W	
R38	1-260-085-11	CARBON	68	5% 1/2W	
R41	1-216-063-00	METAL GLAZE	3.9K	5% 1/10W	
R43	1-216-295-00	CONDUCTOR, CHIP (2012)			
R44	1-216-061-00	METAL GLAZE	3.3K	5% 1/10W	
R45	1-216-021-00	METAL GLAZE	68	5% 1/10W	
R46	1-216-021-00	METAL GLAZE	68	5% 1/10W	
R47	1-216-021-00	METAL GLAZE	68	5% 1/10W	
		<CRYSTAL>			
X01	1-579-266-31	CRYSTAL VIBRATOR			

****

MISCELLANEOUS
****

1-544-453-21 SPEAKER (2CM)
1-504-305-11 SPEAKER (5X12CM)
⚠8-733-234-05 PICTURE TUBE (M50KWL10X)
⚠8-451-404-11 DEFLECTION YOKE (Y25GTAS)
⚠1-493-619-11 COIL, DEMAGNETIZATION
⚠1-524-062-22 CORD, POWER (WITH CONNECTOR)
2.5A/250V
(KV-G25M1(ME)/M1(RUSS)/M11)
⚠1-769-609-21 CORD, POWER (WITH CONNECTOR)
(KV-G25M1(HK))

****

ACCESSORIES AND PACKING MATERIALS
****

3-800-141-21 MANUAL, INSTRUCTION (KV-G25M1(ME)
3-800-141-41 MANUAL, INSTRUCTION
(KV-G25M1(HK)/M11)
3-800-141-51 MANUAL, INSTRUCTION (KV-G25M1(RUSS))
*4-029-168-01 BAG, PROTECTION (KV-G25M11)
*4-039-372-01 BAG, PROTECTION (KV-G25M1)
3-701-910-00 SCREW, SPECIAL (DIA. 3.8X20)
4-392-003-11 BAND, HOLD
4-392-004-11 CLIP
⚠1-569-008-11 ADAPTER, CONVERSION 2P
(KV-G25M1(ME)/M1(RUSS))
*4-047-806-01 CUSHION (UPPER) (ASSY) (KV-G25M1)
*4-047-807-01 CUSHION (LOWER) (ASSY) (KV-G25M1)
*4-047-808-01 INDIVIDUAL CARTON (KV-G25M1)

REF.NO.	PART NO.	DESCRIPTION	REMARK
		REMOTE COMMANDER **********	
	1-473-323-11	REMOTE COMMANDER (RM-870)	

SONY

SERVICE MANUAL

BG-1S CHASSIS

SUPPLEMENT

SUBJECT : A Board circuit changes due to the new version of IC001 and IC300.

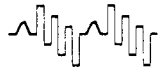
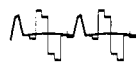
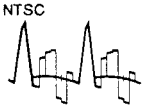
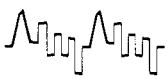
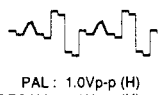
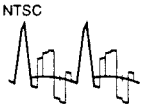
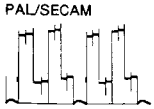
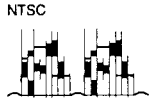
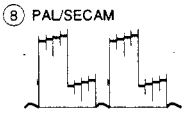
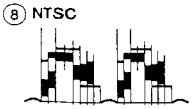
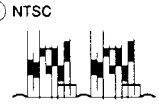
File this supplement with the Service Manual.

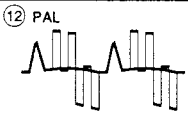
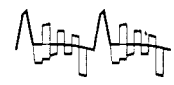
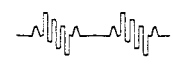
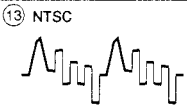
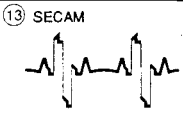
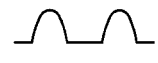
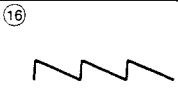
INTRODUCTION : 1. Version of IC001 and IC300 on A board were renewed and the surrounding parts were chenged accordingly.
2. TV sets using this newversion IC001 and IC300 have no A1 board.
3. Be sure to check serial numbers of the TV set and refer fo this circuit diagram when repairing.

MODEL	REF. NO.	PARTS NO.	DESCRIPTION	SERIAL NO.
KV-G25M1 (ME)	IC001	8-752-871-29	CXP85116B-636S	1,045,901 and later
	IC300	8-759-365-26	TDA8375A	1,045,901 and later
KV-G25M1 (HK)	IC001	8-752-871-29	CXP85116B-636S	1,401,551 and later
	IC300	8-759-365-26	TDA8375A	1,401,551 and later
KV-G25M1 (RUSS)	IC001	8-752-871-29	CXP85116B-636S	1,450,001 and later
	IC300	8-759-365-26	TDA8375A	1,450,001 and later
KV-G25M11 (ME)	IC001	8-752-871-29	CXP85116B-636S	1,002,601 and later
	IC300	8-759-365-26	TDA8375A	1,002,601 and later

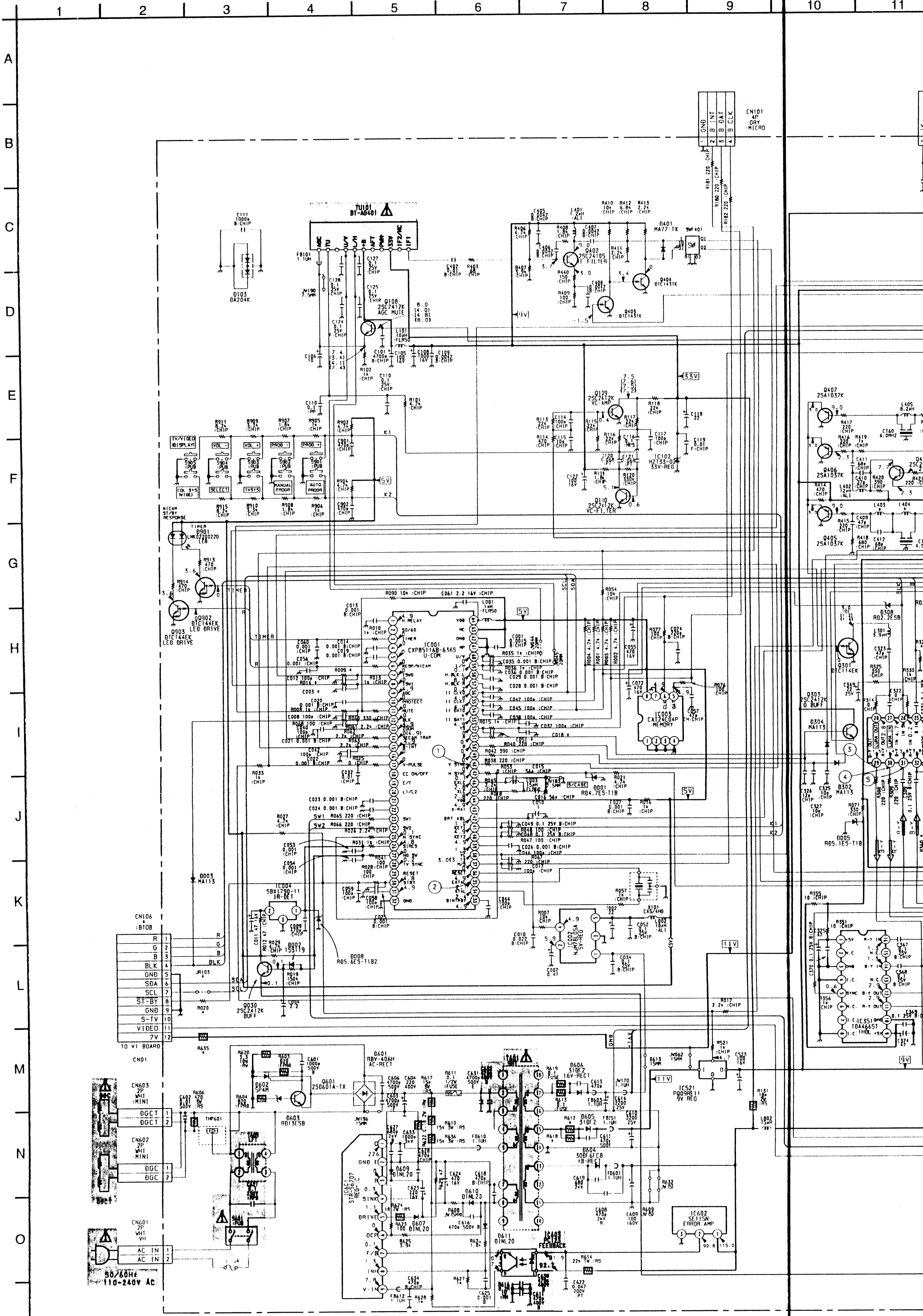
MICROFILM

A BOARD WAVEFORMS

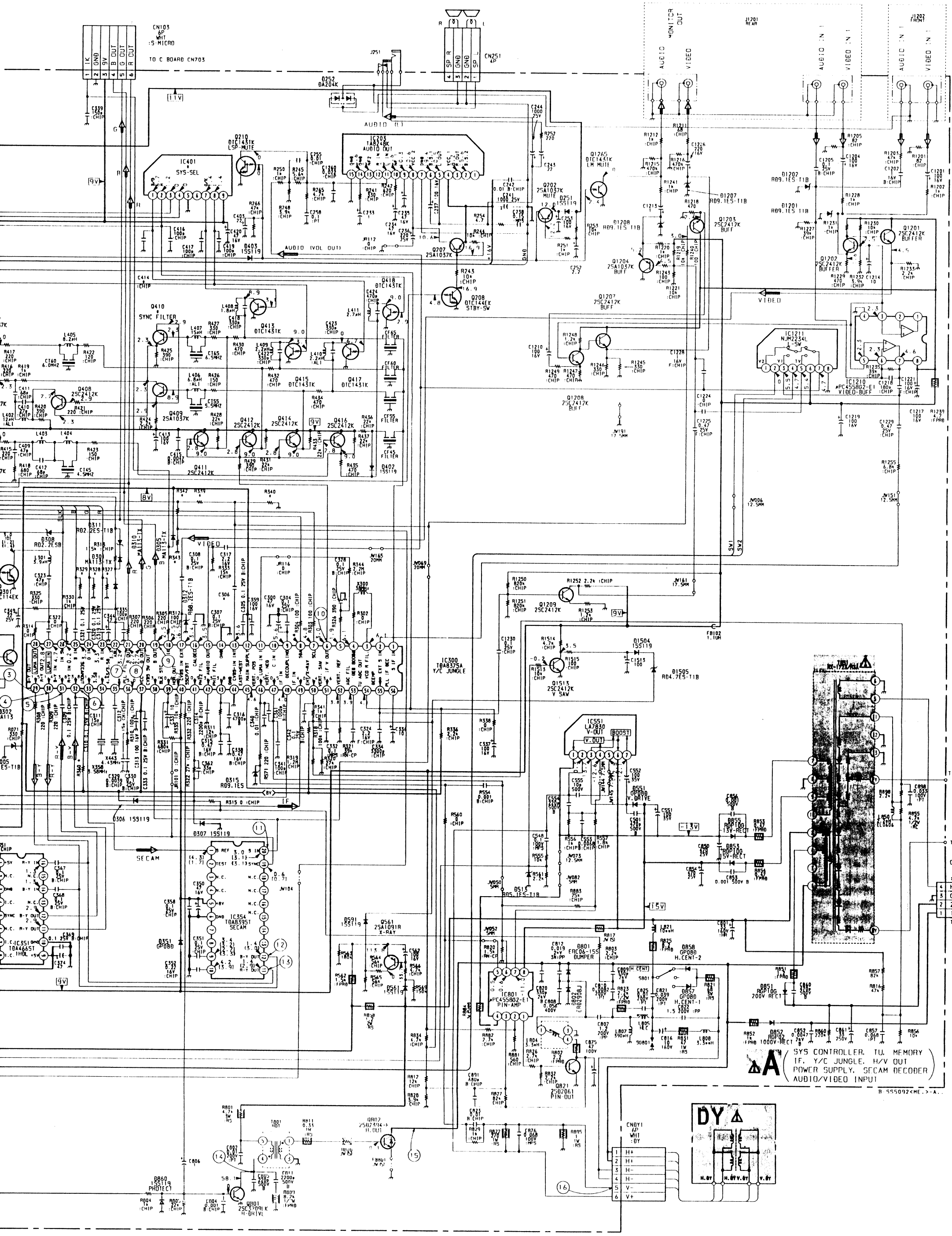
① 5.0Vp-p (H)	② 4.0Vp-p	③ PAL 0.7Vp-p (H)
③ NTSC 0.6Vp-p (H)	③ SECAM  1.6Vp-p (H)	④ PAL  0.6Vp-p (H)
④ NTSC  0.4Vp-p (H)	④ SECAM 1.2Vp-p (H)	⑤ PAL/SECAM PAL : 1.3Vp-p (H) SECAM : 1.5Vp-p (H)
⑤ NTSC  0.8Vp-p (H)	⑥ PAL/SECAM  PAL : 1.0Vp-p (H) SECAM : 1.2Vp-p (H)	⑥ NTSC  0.6Vp-p (H)
⑦ PAL/SECAM  3.6Vp-p (H)	⑦ NTSC  4.0Vp-p (H)	⑧ PAL/SECAM  3.3Vp-p (H)
⑧ NTSC  4.0Vp-p (H)	⑨ PAL/SECAM PAL : 3.4Vp-p (H) SECAM : 3.0Vp-p (H)	⑨ NTSC  4.0Vp-p (H)

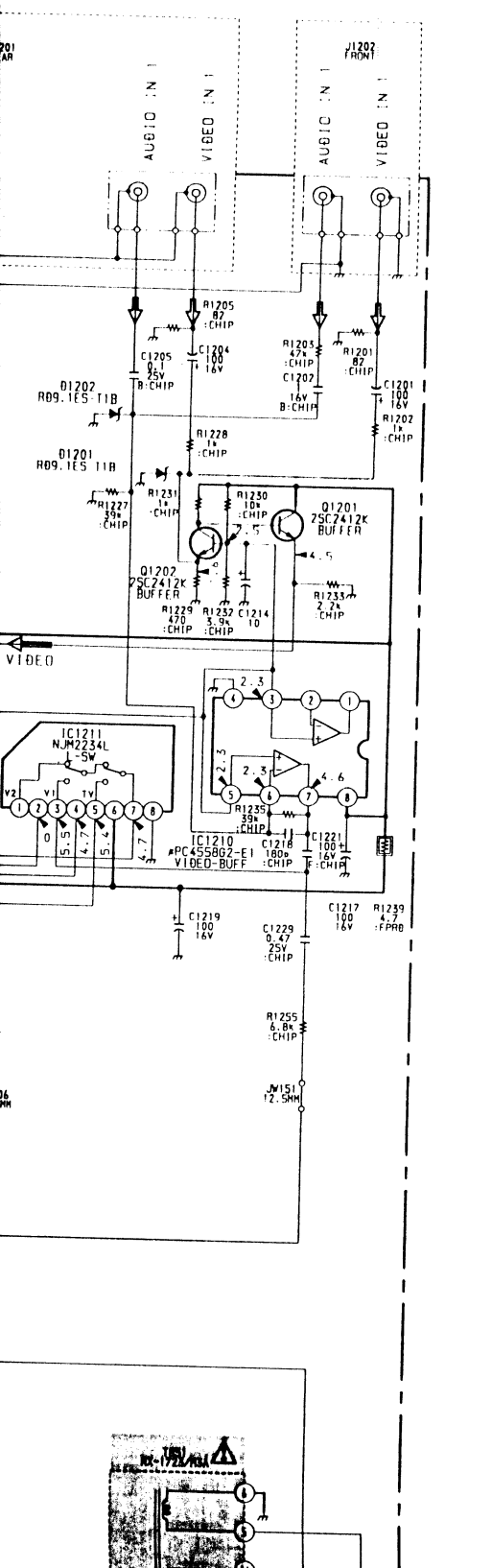
⑩ PAL 2.2Vp-p (H)	⑩ NTSC 3.0Vp-p (H)	⑩ SECAM 2.2Vp-p (H)
⑪ PAL 1.0Vp-p (H)	⑪ NTSC 1.3Vp-p (H)	⑪ SECAM 1.0Vp-p (H)
⑫ PAL  0.7Vp-p (H)	⑫ NTSC  0.6Vp-p (H)	⑫ SECAM  1.5Vp-p (H)
⑬ PAL 0.6Vp-p (H)	⑬ NTSC  0.5Vp-p (H)	⑬ SECAM  1.2Vp-p (H)
⑭ 150Vp-p (H)	⑮  800Vp-p (H)	⑯  2Vp-p (V)

(1) Schematic Diagram of A Board



MC-Service

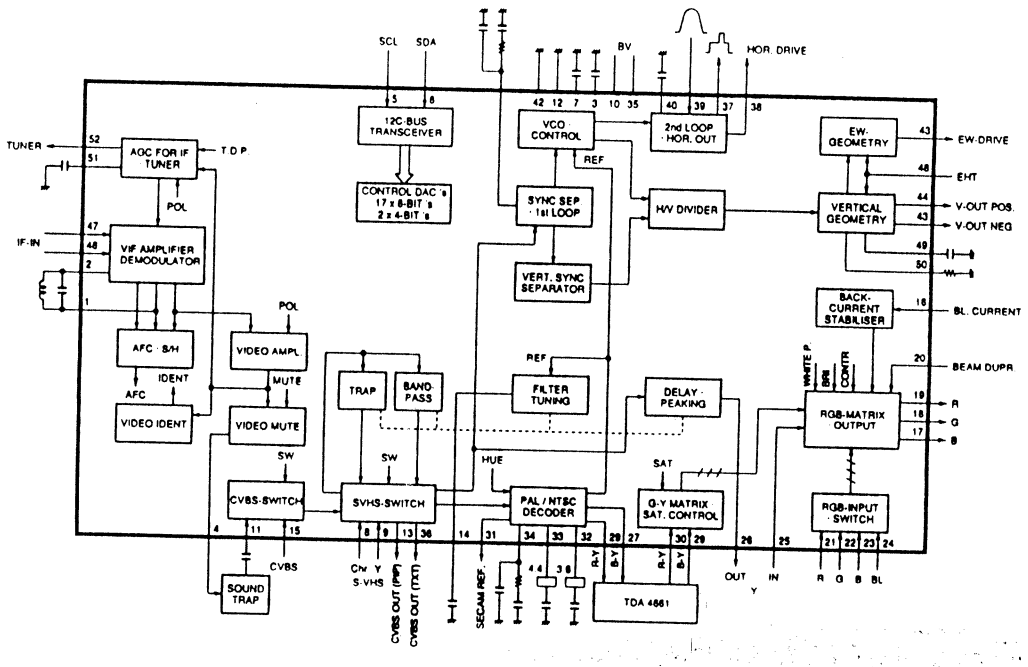

CN103
6P
WHT
:S-MICRO
TO C BOARD CN703
1K
GND
9V
B OUT
G OUT
R OUT
CN251
4P
SP R
GND
GND
SP L
J251
D252
DA204K
AUDIO (L)
J1201
REAR
J1202
FRONT
MONITOR OUT
AUDIO
VIDEO
IC401
SYS-SEL
Q210
DTC143TK
LSP-MUTE
IC203
TA8248K
AUDIO OUT
Q1265
DTC143TK
LM MUTE
Q702
2SA1037K
MUTE
D251
1SS119
Q207
2SA1037K
Q208
DTC144EK
STBY-SW
AUDIO (VOL OUT)
Q1203
2SC2412K
BUFF
Q1204
2SA1037K
BUFF
Q1207
2SC2412K
BUFF
Q1208
2SC2412K
BUFF
D1207
RD9.1ES-T1B
D1208
RD9.1ES-T1B
D1202
RD9.1ES-T1B
D1201
RD9.1ES-T1B
Q1201
2SC2412K
BUFFER
Q1202
2SC2412K
BUFFER
IC1211
NJM2234L
-5V
IC1210
#PC455BG2-E1
VIDEO-BUFF
JW191
17.5MM
JW006
12.5MM
JW151
12.5MM
JW161
17.5MM
JW165
20MM
JW049
20MM
FB102
1.1UH
D1504
1SS119
D1505
RD4.7ES-T1B
Q1513
2SC2412K
V SAW
IC300
T0A8375A
Y/C JUNGLE
Q410
SYNC FILTER
Q408
2SC2412K
Q409
2SA1037K
Q411
2SC2412K
Q412
2SC2412K
Q413
DTC143TK
Q414
2SC2412K
Q415
DTC143TK
Q416
2SC2412K
Q417
DTC143TK
Q418
DTC143TK
CF65
FILTER
CF60
FILTER
CF55
FILTER
CF45
FILTER
CT60
6.0MHZ
CT65
6.5MHZ
CT55
5.5MHZ
CT45
4.5MHZ
D311
RD2.2ES-T1B
D308
RD2.2ESB
D310
MA113-TX
D305
MA113-TX
D309
MA113-TX
VIDEO
SECAM
D306
1SS119
D307
1SS119
D315
RD9.1ES
IC354
T0A8395ST
SECAM
D351
GP08D
D591
1SS119
Q561
2SA1091R
X-RAY
IC1801
#PC455B02-E1
PIN-AMP
D801
ERC06-15S
DUMPER
D858
GP08D
H.CENT-2
D857
GP08D
H.CENT-1
Q821
2SD2061
PIN-OUT
D851
RGP10G
200V RECT
D852
RGP02
1000V-RECT
IC551
LA7830
V-OUT
BOOST
V.OUT
D551
GP08D
V.DRIVE
D853
RGP10G
-13V-RECT
D855
RGP10G
-13V-RECT
-13V
15V
Q801
2SD2698J
Q802
2SK2996-K
H.OUT
Q803
2SC2709K
H-DRIVE
TO C BOARD
FOCUS
TO CRT
HV
CN851
4P
WHT
:MINI
H1
GND
200V
1000V
TO C BOARD
CN704
CN01Y
6P
WHT
:DY
H+
H+
H-
H-
V-
V+
DY
H.DY
H.DY
V.DY
V.DY
SYS CONTROLLER, TU, MEMORY
IF, Y/C JUNGLE, H/V OUT
POWER SUPPLY, SECAM DECODER
AUDIO/VIDEO INPUT
B-955092<ME.>-A..



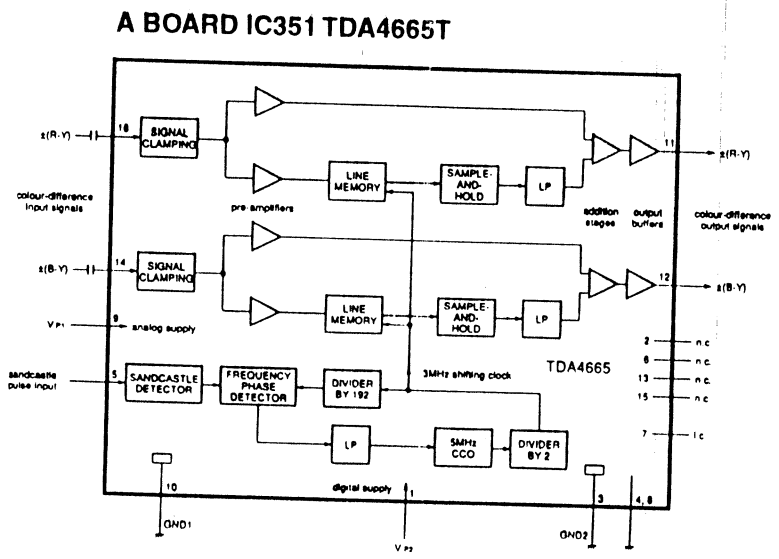
A BOARD ✻ MARK LIST

	KV-G25M1	KV-G25M11
C018	100 :CHIP	NOT USED
C051	NOT USED	100p :CHIP
C306	0.1 25V :CHIP	0 :CHIP
CN106	NOT USED	12P :B TO B
JR103	NOT USED	0 :CHIP
R020	NOT USED	100 :CHIP
R327	0 :CHIP	150 :CHIP
R328	0 :CHIP	150 :CHIP
R329	0 :CHIP	150 :CHIP
R339	300 :CHIP	NOT USED
R340	270 :CHIP	NOT USED
R342	NOT USED	300 :CHIP
R343	NOT USED	270 :CHIP
R612	0.47 :FPRD	0.1 :FUSE
R618	NOT USED	0.1 :FUSE
R635	NOT USED	22 2W :RS

A BOARD IC300 TDA8375A



A BOARD IC351 TDA4665T



MC-Service

PRINTED WIRING BOARD

A [SYS CONTROLLER, TU, MEMORY, IF, Y/C JUNGLE, H/V OUT
POWER SUPPLY, SECAM DECORDER, AUDIO/VIDEO INPUT]

A BOARD

IC

IC001	D-11
IC002	E-10
IC003	E-11
IC004	I-13
IC005	E-10
IC101	E-3
IC102	E-7
IC201	A-8
IC202	B-10
IC203	B-10
IC300	D-6
IC351	D-8
IC354	D-7
IC401	B-6
IC521	E-8
IC551	J-6
IC601	J-8
IC602	H-7
IC603	I-7
IC801	G-6
IC1210	A-2
IC1211	B-3
IC1212	A-3

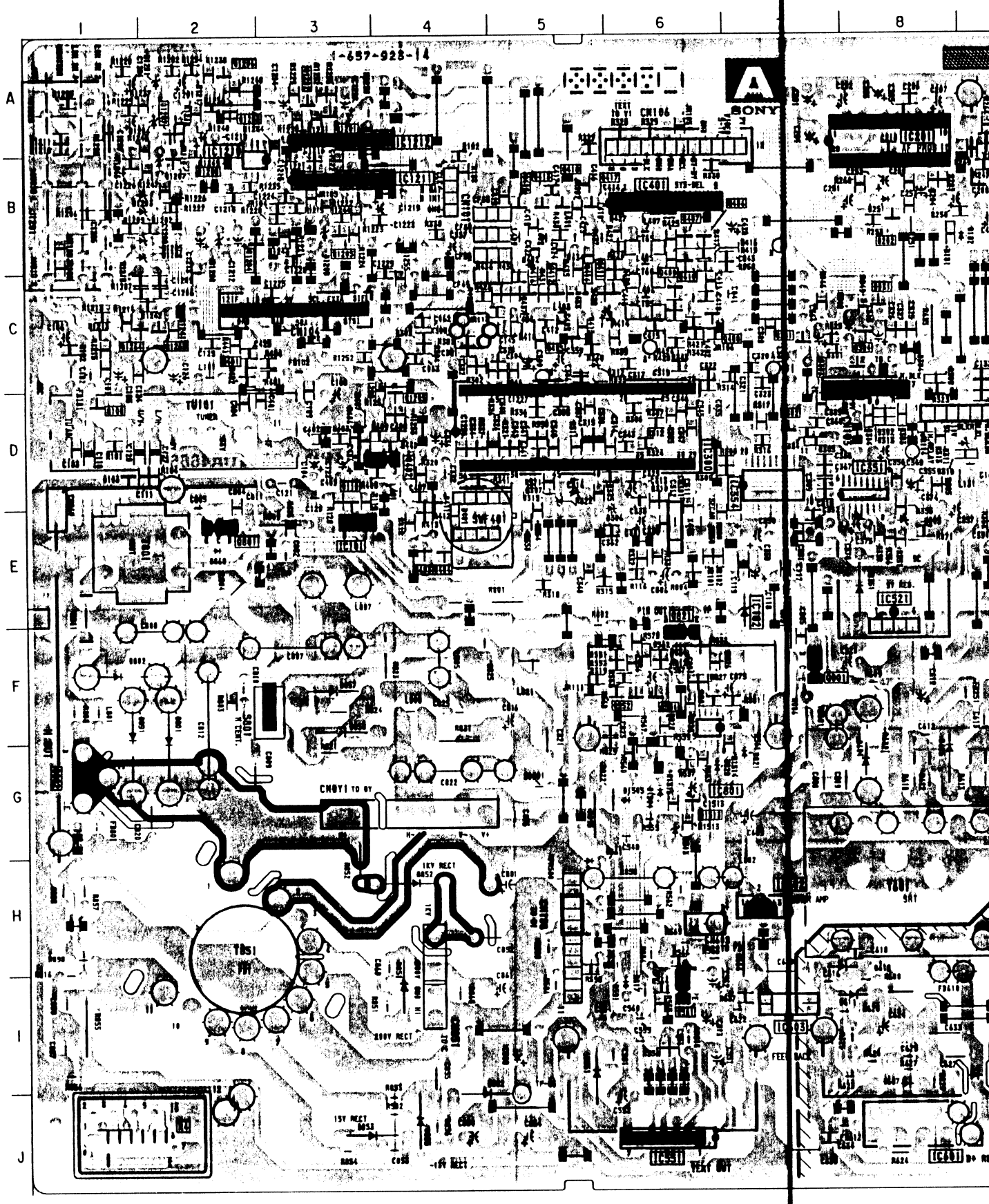
TRANSISTOR

Q001	F-7
Q030	C-12
Q031	C-8
Q108	D-1
Q109	E-12
Q110	D-3
Q202	B-8
Q207	B-10
Q208	B-10
Q209	B-9
Q210	B-9
Q301	C-7
Q302	D-7
Q303	C-7
Q304	C-8
Q351	D-9
Q401	C-2
Q402	D-4
Q403	E-4
Q404	E-4
Q405	C-5
Q406	B-6
Q407	B-6
Q408	C-6
Q409	C-6
Q410	B-6
Q411	B-5
Q412	C-5
Q413	B-5
Q414	C-5
Q415	B-5
Q416	C-5
Q417	B-5
Q418	B-5
Q551	F-6
Q552	F-6
Q561	I-6
Q601	G-12
Q801	E-2
Q802	G-1
Q821	F-6
Q902	H-13
Q903	H-13
Q1201	A-3
Q1202	A-3
Q1203	A-2
Q1204	B-2
Q1205	B-3
Q1206	A-2
Q1207	A-2
Q1208	B-2
Q1209	D-4
Q1264	C-1
Q1265	C-2
Q1513	G-6

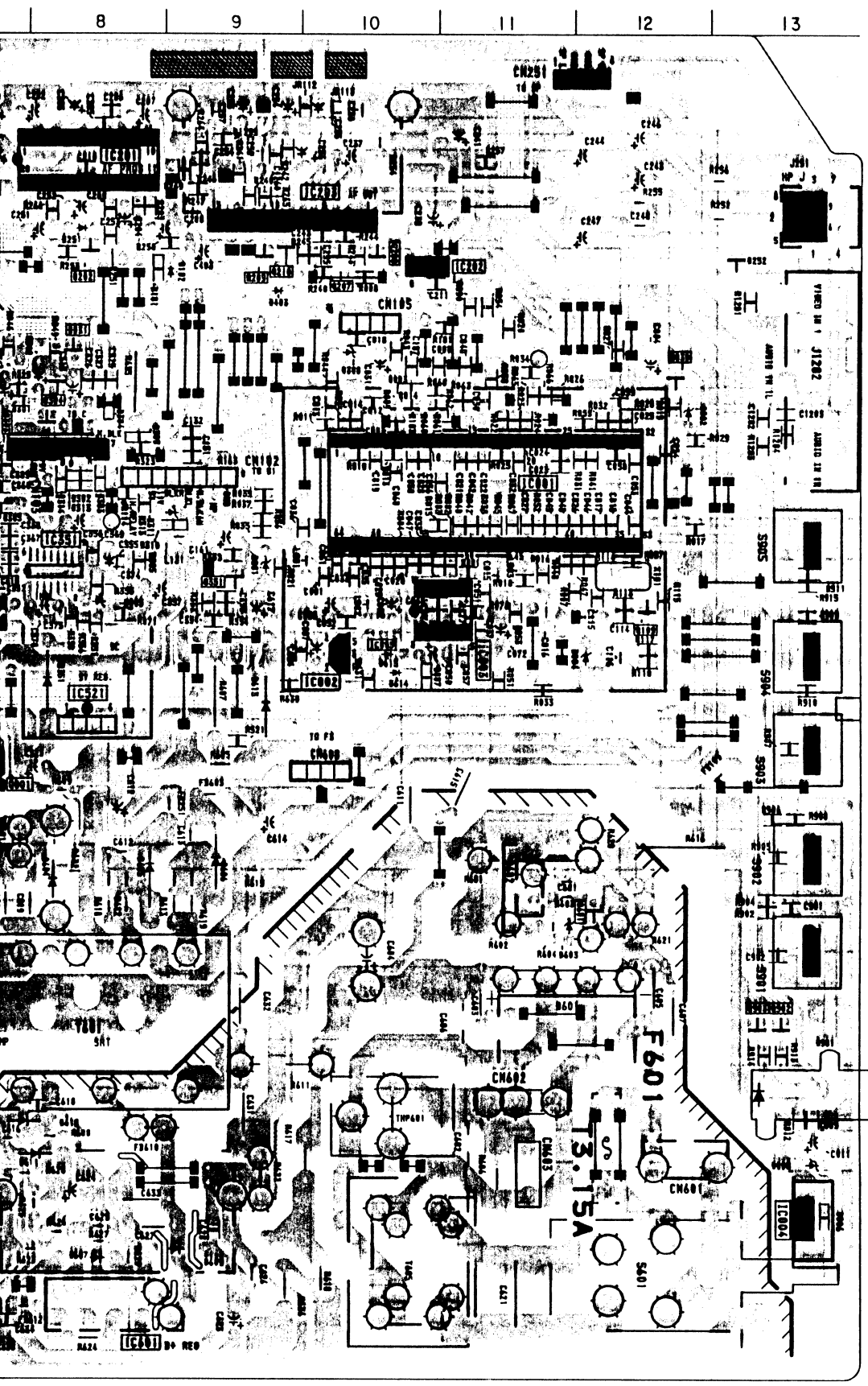
DIODE

D001	D-9
D002	C-12
D003	C-10
D004	E-12
D005	E-8
D006	I-13
D007	E-10
D008	I-13
D101	B-8
D102	B-9
D103	D-1
D251	B-8
D252	B-13
D301	C-7
D302	D-8
D303	D-8
D304	C-8
D305	D-7
D306	E-6
D307	D-5
D308	C-10
D309	C-8
D310	D-9
D311	D-9
D312	C-5
D313	D-8
D314	D-8
D315	D-5
D351	E-8
D401	E-4
D402	B-5
D403	B-9
D513	G-6
D551	I-5
D561	H-5
D562	F-6
D581	H-5
D582	I-4
D591	I-6
D601	H-11
D602	G-11
D603	G-11
D604	G-8
D605	G-8
D606	G-9
D607	I-8
D609	I-9
D610	H-7
D611	I-7
D613	E-9
D614	E-10
D615	E-10
D801	F-2
D802	F-1
D820	G-6
D821	G-7
D851	H-4
D852	H-4
D853	J-3
D855	J-4
D857	F-3
D858	F-3
D860	E-2
D891	F-1
D901	H-13
D1201	A-2
D1202	B-2
D1203	B-2
D1204	A-2
D1205	B-2
D1206	B-2
D1207	B-2
D1208	B-2
D1209	B-3
D1504	G-6
D1505	G-6

– A Board –



Schematic diagram
← [A] board



NOTE:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

NOTE:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

ELECTRICAL PARTS LIST

A

NOTE:

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The componants identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

- The components identified by ⧓ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

RESISTORS
- All resistors are in ohms
- F : nonflammable

When indicating parts by reference number, please include the board name.

- CAPACITORS
  PF : μμ F
- There are some cases the reference number on one board overlaps on the other board. Therefore, when ordering parts by the reference number, please include the board name.

REF. NO.	PART NO.	DESCRIPTION			REMARK
	*A-1297-773-A	A BOARD, COMPLETE (KV-G25M11) **********			
	*A-1297-768-A	A BOARD, COMPLETE (KV-G25M1) **********			
	*1-580-798-11	CONNECTOR PIN (DY) 6P			
	4-039-460-01	HOLDER, FBT			
	4-382-854-11	SCREW (M3X10), P, SW (+)			
	7-685-648-79	SCREW +BVTP 3X12 TYPE2 IT-3			
		<CAPACITOR>			
C001	1-163-011-11	CERAMIC CHIP	0.0015MF	10%	50V
C002	1-126-965-11	ELECT	22MF	20%	50V
C003	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C004	1-126-961-11	ELECT	2.2MF	20%	50V
C007	1-124-902-00	ELECT	0.47MF	20%	50V
C008	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C009	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C010	1-163-037-11	CERAMIC CHIP	0.022MF	10%	50V
C011	1-126-967-11	ELECT	47MF	20%	16V
C012	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C013	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C014	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C015	1-101-884-00	CERAMIC	56PF	5%	50V
C016	1-101-884-00	CERAMIC	56PF	5%	50V
C017	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C018	1-163-117-00	CERAMIC CHIP	100PF	5%	50V (KV-G25M11)
C019	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C020	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C021	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C022	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C023	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C024	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C025	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C026	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C027	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C028	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C029	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C034	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C035	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C036	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C037	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C038	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C040	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C042	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C044	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C045	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C046	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C047	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C048	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C049	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C050	1-124-903-11	ELECT	1MF	20%	50V
C051	1-163-117-00	CERAMIC CHIP	100PF	5%	50V (KV-G25M11)
C052	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C053	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C055	1-126-941-11	ELECT	470MF	20%	16V
C056	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C057	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C058	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C059	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C060	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C061	1-164-505-11	CERAMIC CHIP	2.2MF		16V
C072	1-126-941-11	ELECT	470MF	20%	16V
C074	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C101	1-163-029-11	CERAMIC CHIP	0.0047MF		50V
C105	1-104-665-11	ELECT	100MF	20%	16V
C106	1-124-907-11	ELECT	10MF	20%	50V
C108	1-126-942-61	ELECT	1000MF	20%	16V
C109	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V
C110	1-136-165-00	FILM	0.1MF	5%	50V
C111	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C114	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C115	1-163-093-00	CERAMIC CHIP	10PF	5%	50V
C116	1-136-165-00	FILM	0.1MF	5%	50V
C117	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C118	1-126-965-11	ELECT	22MF	20%	50V
C119	1-163-059-00	CERAMIC CHIP	0.01MF		50V
C120	1-130-493-00	MYLAR	0.068MF	5%	50V
C121	1-130-493-00	MYLAR	0.068MF	5%	50V
C122	1-104-665-11	ELECT	100MF	20%	16V
C124	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C125	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C127	1-163-077-00	CERAMIC CHIP	0.1MF	10%	25V
C128	1-163-077-00	CERAMIC CHIP	0.1MF	10%	25V
C233	1-124-903-11	ELECT	1MF	20%	50V
C234	1-126-967-11	ELECT	47MF	20%	16V
C235	1-126-967-11	ELECT	47MF	20%	16V
C236	1-126-968-11	ELECT	100MF	20%	35V
C237	1-104-665-11	ELECT	100MF	20%	16V
C238	1-136-167-00	FILM	0.15MF	5%	50V
C241	1-126-942-61	ELECT	1000MF	20%	25V
C242	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C243	1-128-551-11	ELECT	22MF	20%	25V
C244	1-126-942-61	ELECT	1000MF	20%	25V
C253	1-104-665-11	ELECT	100MF	20%	16V
C255	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V
C258	1-130-495-00	MYLAR	0.1MF	5%	50V
C300	1-126-967-11	ELECT	47MF	20%	16V
C304	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C305	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C306	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V (KV-G 25M1)
C306	1-216-295-91	CONDUCTOR, CHIP (KV-G25M11)			
C307	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V
C308	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V

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The componants identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION				REMARK
C309	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C310	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C311	1-163-231-11	CERAMIC CHIP	15PF	5%	50V	
C312	1-163-231-11	CERAMIC CHIP	15PF	5%	50V	
C313	1-104-665-11	ELECT	100MF	20%	16V	
C314	1-164-161-11	CERAMIC CHIP	0.0022MF	10%	50V	
C315	1-165-320-11	CERAMIC CHIP	0.47MF	10%	16V	
C316	1-102-125-00	CERAMIC	0.0047MF	10%	50V	
C317	1-164-505-11	CERAMIC CHIP	2.2MF		16V	
C319	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C320	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C321	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C322	1-216-295-91	CONDUCTOR, CHIP				
C323	1-163-243-11	CERAMIC CHIP	47PF	5%	50V	
C324	1-164-337-11	CERAMIC CHIP	2.2MF		16V	
C325	1-163-093-00	CERAMIC CHIP	10PF	5%	50V	
C326	1-163-095-00	CERAMIC CHIP	12PF	5%	50V	
C327	1-163-093-00	CERAMIC CHIP	10PF	5%	50V	
C328	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C329	1-163-016-00	CERAMIC CHIP	0.0039MF	10%	50V	
C330	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C331	1-124-907-11	ELECT	10MF	20%	50V	
C332	1-136-165-00	FILM	0.1MF	5%	50V	
C333	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C334	1-164-182-11	CERAMIC CHIP	0.0033MF	10%	50V	
C335	1-102-973-00	CERAMIC	100PF	5%	50V	
C336	1-124-907-11	ELECT	10MF	20%	50V	
C337	1-104-665-11	ELECT	100MF	20%	16V	
C338	1-165-320-11	CERAMIC CHIP	0.47MF	10%	16V	
C339	1-163-121-00	CERAMIC CHIP	150PF	5%	50V	
C340	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V	
C341	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C342	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C344	1-126-963-11	ELECT	4.7MF	20%	50V	
C349	1-128-551-11	ELECT	22MF	20%	25V	
C350	1-126-967-11	ELECT	47MF	20%	16V	
C351	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C352	1-164-489-11	CERAMIC CHIP	0.22MF	10%	16V	
C358	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C359	1-104-665-11	ELECT	100MF	20%	16V	
C361	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V	
C362	1-163-101-00	CERAMIC CHIP	22PF	5%	50V	
C367	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C368	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C369	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C370	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	
C374	1-124-910-11	ELECT	47MF	20%	50V	
C375	1-124-910-11	ELECT	47MF	20%	50V	
C402	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
C403	1-126-965-11	ELECT	22MF	20%	50V	
C405	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V	
C406	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V	
C407	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V	
C408	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V	
C409	1-163-109-00	CERAMIC CHIP	47PF	5%	50V	
C410	1-163-103-00	CERAMIC CHIP	27PF	5%	50V	
C411	1-163-113-00	CERAMIC CHIP	68PF	5%	50V	
C412	1-163-113-00	CERAMIC CHIP	68PF	5%	50V	
C413	1-104-665-11	ELECT	100MF	20%	16V	
C414	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C415	1-163-017-00	CERAMIC CHIP	0.0047MF	10%	50V	
C416	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C417	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C418	1-163-129-00	CERAMIC CHIP	330PF	5%	50V	
C419	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	
C420	1-126-967-11	ELECT	47MF	20%	16V	
C422	1-163-129-00	CERAMIC CHIP	330PF	5%	50V	
C423	1-163-129-00	CERAMIC CHIP	330PF	5%	50V	
C424	1-163-133-00	CERAMIC CHIP	470PF	5%	50V	
C501	1-102-228-00	CERAMIC	470PF	10%	500V	
C523	1-104-665-11	ELECT	100MF	20%	16V	
C548	1-106-220-00	MYLAR	0.1MF	10%	100V	
C551	1-126-968-11	ELECT	100MF	20%	35V	
C552	1-126-968-11	ELECT	100MF	20%	35V	
C553	1-163-019-00	CERAMIC CHIP	0.0068MF	10%	50V	
C554	1-102-244-00	CERAMIC	220PF	10%	500V	
C555	1-101-804-00	CERAMIC	10PF	5%	500V	
C562	1-104-665-11	ELECT	100MF	20%	16V	
C601	1-162-318-11	CERAMIC	0.001MF	10%	500V	
C602	1-102-050-00	CERAMIC	0.01MF		500V	
C603	1-161-830-00	CERAMIC	0.0047MF		500V	
C604	1-113-608-11	ELECT(SOLID)	470MF	20%	400V	
C606	1-161-830-00	CERAMIC	0.0047MF		500V	
C608	1-104-332-11	CERAMIC	470PF	10%	2KV	
C609	1-124-347-00	ELECT	100MF	20%	160V	
C610	1-126-943-11	ELECT	2200MF	20%	25V	
C611	⚠ 1-104-985-51	CERAMIC	470PF	10%	400V	
C612	1-102-228-00	CERAMIC	470PF	10%	500V	
C613	1-102-824-00	CERAMIC	470PF	5%	50V	
C614	1-126-943-11	ELECT	2200MF	20%	25V	
C616	1-102-228-00	CERAMIC	470PF	10%	500V	
C618	1-163-005-11	CERAMIC CHIP	470PF	10%	50V	
C619	1-162-116-00	CERAMIC	680PF	10%	2KV	
C621	⚠ 1-104-705-51	FILM	0.1MF	20%	250V	
C622	1-106-383-00	MYLAR	0.047MF	10%	200V	
C623	1-124-120-11	ELECT	220MF	20%	16V	
C624	1-126-942-61	ELECT	1000MF	20%	16V	
C625	1-102-074-00	CERAMIC	0.001MF	10%	50V	
C627	1-162-116-00	CERAMIC	680PF	10%	2KV	
C630	⚠ 1-104-985-51	CERAMIC	470PF	10%	400V	
C631	1-161-830-00	CERAMIC	0.0047MF		500V	
C632	⚠ 1-104-985-51	CERAMIC	470PF	10%	400V	
C633	1-161-754-00	CERAMIC	0.001MF	10%	3KV	
C634	1-163-005-11	CERAMIC CHIP	470PF	10%	50V	
C801	1-123-024-21	ELECT	33MF		160V	
C802	1-106-367-00	MYLAR	0.01MF	10%	200V	
C804	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V	
C805	1-102-244-00	CERAMIC	220PF	10%	500V	
C806	1-124-903-11	ELECT	1MF	20%	50V	
C807	1-136-540-11	FILM	0.82MF	5%	200V	
C808	1-130-895-00	FILM	0.056MF	10%	400V	
C809	1-162-115-00	CERAMIC	330PF	10%	2KV	
C810	1-106-365-00	MYLAR	0.0082MF		200V	
C811	1-162-318-11	CERAMIC	0.001MF	10%	500V	
C812	1-136-617-11	FILM	0.019MF	3%	2KV	
C816	1-123-947-00	ELECT	10MF	20%	160V	
C820	1-162-115-00	CERAMIC	330PF	10%	2KV	
C821	1-106-391-12	MYLAR	0.1MF	10%	200V	
C822	1-136-541-11	FILM	1.5MF	5%	200V	
C823	1-164-232-11	CERAMIC CHIP	0.01MF	10%	50V	
C825	1-106-367-00	MYLAR	0.01MF	10%	200V	
C850	1-124-480-11	ELECT	470MF	20%	25V	
C852	1-104-574-11	CERAMIC	0.0047MF	10%	2KV	
C853	1-162-318-11	CERAMIC	0.001MF	10%	500V	
C854	1-124-480-11	ELECT	470MF	20%	25V	
C856	1-162-318-11	CERAMIC	0.001MF	10%	500V	
C857	1-136-165-00	FILM	0.1MF	5%	50V	
C860	1-102-228-00	CERAMIC	470PF	10%	500V	
C861	1-107-654-11	ELECT	33MF	20%	250V	
C875	1-124-910-11	ELECT	47MF	20%	50V	
C876	1-108-702-11	MYLAR	0.068MF	10%	100V	
C891	1-163-007-11	CERAMIC CHIP	680PF	10%	50V	
C898	1-108-702-11	MYLAR	0.068MF	10%	100V	
C901	1-163-133-00	CERAMIC CHIP	470PF	5%	50V	
C902	1-163-133-00	CERAMIC CHIP	470PF	5%	50V	
C1201	1-104-665-11	ELECT	100MF	20%	16V	
C1202	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	

The componants identified by shading and mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite.
Ne les remplacer que par une piece portant le numero specifie.

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REF. NO.	PART NO.	DESCRIPTION	REMARK
C1204	1-104-665-11	ELECT 100MF 20% 16V	
C1205	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1210	1-104-665-11	ELECT 100MF 20% 16V	
C1213	1-124-903-11	ELECT 1MF 20% 50V	
C1214	1-124-907-11	ELECT 10MF 20% 50V	
C1217	1-104-665-11	ELECT 100MF 20% 16V	
C1218	1-163-123-00	CERAMIC CHIP 180PF 5% 50V	
C1219	1-104-665-11	ELECT 100MF 20% 16V	
C1221	1-164-005-11	CERAMIC CHIP 0.47MF 25V	
C1224	1-216-295-91	CONDUCTOR, CHIP	
C1225	1-164-005-11	CERAMIC CHIP 0.47MF 25V	
C1226	1-124-120-11	ELECT 220MF 20% 16V	
C1228	1-164-346-11	CERAMIC CHIP 1MF 16V	
C1229	1-164-005-11	CERAMIC CHIP 0.47MF 25V	
C1230	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C1260	1-163-037-11	CERAMIC CHIP 0.022MF 10% 50V	
C1513	1-124-122-11	ELECT 100MF 20% 50V	
		<FILTER>	
CF45	1-527-943-00	FILTER, CERAMIC	
CF55	1-567-099-00	FILTER, CERAMIC	
CF60	1-567-100-00	FILTER, CERAMIC	
CF65	1-567-101-11	FILTER, CERAMIC	
		<CONNECTOR>	
CN101	*1-560-124-00	PLUG, CONNECTOR (2.5MM) 4P	
CN103	*1-564-509-11	PLUG, CONNECTOR 6P	
CN106	*1-770-747-11	CONNECTOR, BOARD TO BOARD 12P (KV-G25M11)	
CN251	*1-564-507-11	PLUG, CONNECTOR 4P	
CN601	*1-580-843-11	PIN, CONNECTOR (POWER)	
CN602	*1-508-765-00	PIN, CONNECTOR (5mm PITCH) 3P	
CN603	*1-508-786-00	PIN, CONNECTOR (5mm PITCH) 2P	
CN851	*1-508-766-00	PIN, CONNECTOR (5mm PITCH) 4P	
		<TRIMMER>	
CT45	1-579-690-11	TRAP, CERAMIC	
CT55	1-404-801-11	TRAP, CERAMIC	
CT60	1-409-429-11	TRAP, CERAMIC	
CT65	1-409-327-00	TRAP, CERAMIC (6.5MHZ)	
		<DIODE>	
D001	8-719-109-81	DIODE RD4.7ESB2	
D002	8-719-911-19	DIODE 1SS119-25	
D003	8-719-041-97	DIODE MA113-(TX)	
D005	8-719-109-84	DIODE RD5.1ESB1	
D008	8-719-109-89	DIODE RD5.6ESB2	
D103	8-719-914-42	DIODE DA204K	
D251	8-719-911-19	DIODE 1SS119-25	
D252	8-719-914-42	DIODE DA204K	
D301	8-719-041-97	DIODE MA113-(TX)	
D305	8-719-041-97	DIODE MA113-(TX)	
D306	8-719-911-19	DIODE 1SS119-25	
D307	8-719-911-19	DIODE 1SS119-25	
D308	8-719-109-54	DIODE RD2.2ESB2	
D310	8-719-041-97	DIODE MA113-(TX)	
D311	8-719-109-68	DIODE RD3.6ESB1	
D312	8-719-110-08	DIODE RD8.2ESB2	
D315	8-719-121-24	DIODE RD9.1ESL	
D351	8-719-908-03	DIODE GP08D	
D399	8-719-121-24	DIODE RD9.1ESL	
D401	8-719-421-40	DIODE MA77	
D402	8-719-911-19	DIODE 1SS119-25	
D403	8-719-911-19	DIODE 1SS119-25	
D513	8-719-109-84	DIODE RD5.1ESB1	
D551	8-719-908-03	DIODE GP08D	
D561	8-719-911-19	DIODE 1SS119-25	
D591	8-719-911-19	DIODE 1SS119-25	
D601	8-719-052-84	DIODE LN4SB60	
D602	8-719-108-18	THYRISTOR 5P6M	
D603	8-719-110-36	DIODE RD13ESB2	
D604	8-719-301-64	DIODE RU4DS	
D605	8-719-510-73	DIODE S3L20UF4	
D606	8-719-510-73	DIODE S3L20UF4	
D607	8-719-510-26	DIODE D1NL20-TA	
D609	8-719-510-26	DIODE D1NL20-TA	
D610	8-719-510-26	DIODE D1NL20-TA	
D611	8-719-510-26	DIODE D1NL20-TA	
D801	8-719-945-80	DIODE ERC06-15S	
D802	8-719-900-26	DIODE ERD29-08J	
D851	8-719-302-43	DIODE EL1Z	
D852	8-719-028-72	DIODE RGP02-17EL-6433	
D853	8-719-302-43	DIODE EL1Z	
D855	8-719-302-43	DIODE EL1Z	
D857	8-719-908-03	DIODE GP08D	
D858	8-719-908-03	DIODE GP08D	
D860	8-719-911-19	DIODE 1SS119-25	
D891	8-719-945-80	DIODE ERC06-15S	
D901	8-719-054-60	DIODE LNK0220022G	
D1201	8-719-121-24	DIODE RD9.1ESL	
D1202	8-719-121-24	DIODE RD9.1ESL	
D1207	8-719-121-24	DIODE RD9.1ESL	
D1208	8-719-121-24	DIODE RD9.1ESL	
D1504	8-719-911-19	DIODE 1SS119-25	
D1505	8-719-109-81	DIODE RD4.7ESB2	
		<FUSE>	
F601	⚠ 1-532-237-11	FUSE, TIME-LAG (BET) 3.15A/250V	
	1-533-223-11	CLIP, FUSE ; F601	
		<FERRITE BEAD>	
FB101	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	
FB102	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	
FB251	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	
FB601	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	
FB603	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	
FB610	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	
FB612	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	
FB801	1-410-397-21	FERRITE BEAD INDUCTOR 1.1UH	
		<IC>	
IC001	8-752-873-18	IC CXP85116B-642S	
	*4-049-131-01	CASE (A), SHIELD ; IC001	
IC002	8-759-805-37	IC L78LR05D-MA	
IC003	8-759-093-95	IC CAT24C04P	
IC004	8-741-790-11	ELEMENT,RAY-CATCHER SBX1790-11	
IC102	8-759-157-40	IC uPC574J	
IC203	8-759-336-30	IC TA8223K	
IC300	8-759-365-26	IC TDA8375A	
IC351	8-759-288-85	IC TDA4665T-T	
IC354	8-759-251-56	IC TDA8395T	
IC401	8-759-800-65	IC LA7910	
IC521	8-759-195-63	IC PQ09RE11	
IC551	8-759-801-98	IC LA7830	
IC601	8-749-010-84	IC STR-S6708	
IC602	8-749-920-61	IC SE-135N	
IC603	⚠ 8-749-010-59	PHOTO COUPLER PC123F2	
IC801	8-759-100-96	IC uPC4558G2	
IC1210	8-759-100-96	IC uPC4558G2	
IC1211	8-759-711-23	IC NJM2234L	

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REF. NO.	PART NO.	DESCRIPTION	REMARK
		<JACK>	
J251	1-770-785-11	JACK	
J1201	1-770-660-11	JACK BLOCK, PIN 4P	
J1202	1-695-238-11	JACK BLOCK, PIN 2P	
		<CHIP CONDUCTOR>	
JR101	1-216-295-91	CONDUCTOR, CHIP	
JR103	1-216-295-91	CONDUCTOR, CHIP (KV-G25M11)	
JR112	1-216-295-91	CONDUCTOR, CHIP	
JR116	1-216-295-91	CONDUCTOR, CHIP	
		<COIL>	
L001	1-408-397-00	INDUCTOR 1UH	
L002	1-410-509-11	INDUCTOR 10UH	
L003	1-408-411-00	INDUCTOR 15UH	
L101	1-410-470-11	INDUCTOR 10UH	
L301	1-408-404-00	INDUCTOR 3.9UH	
L401	1-410-498-11	INDUCTOR 1.2UH	
L402	1-410-510-11	INDUCTOR 12UH	
L403	1-410-510-11	INDUCTOR 12UH	
L404	1-410-508-11	INDUCTOR 8.2UH	
L405	1-410-508-11	INDUCTOR 8.2UH	
L406	1-410-507-11	INDUCTOR 6.8UH	
L407	1-410-511-11	INDUCTOR 15UH	
L408	1-410-500-11	INDUCTOR 1.8UH	
L409	1-410-501-11	INDUCTOR 2.2UH	
L410	1-410-501-11	INDUCTOR 2.2UH	
L411	1-410-502-11	INDUCTOR 2.7UH	
L802	1-412-527-11	INDUCTOR 15UH	
L804	1-459-075-00	COIL,DYNAMIC CONVERSION CHOKE	
L805	1-459-907-11	COIL, HORIZONTAL LINEARITY	
L807	1-459-390-00	COIL (WITH CORE)	
L808	1-412-553-11	INDUCTOR 3.3mH	
L821	1-459-111-00	COIL, DRAM CORE (CDI)	
L850	1-408-947-00	INDUCTOR 2.2mH	
		<TRANSISTOR>	
Q030	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q108	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q109	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q110	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q202	8-729-216-22	TRANSISTOR 2SA1162-G	
Q207	8-729-216-22	TRANSISTOR 2SA1162-G	
Q208	8-729-421-19	TRANSISTOR UN2213	
Q210	8-729-424-67	TRANSISTOR UN2216	
Q301	8-729-421-22	TRANSISTOR UN2211	
Q303	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q402	8-729-922-66	TRANSISTOR 2SC2410SN	
Q403	8-729-424-67	TRANSISTOR UN2216	
Q404	8-729-424-67	TRANSISTOR UN2216	
Q405	8-729-216-22	TRANSISTOR 2SA1162-G	
Q406	8-729-216-22	TRANSISTOR 2SA1162-G	
Q407	8-729-216-22	TRANSISTOR 2SA1162-G	
Q408	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q409	8-729-216-22	TRANSISTOR 2SA1162-G	
Q410	8-729-216-22	TRANSISTOR 2SA1162-G	
Q411	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q412	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q413	8-729-424-67	TRANSISTOR UN2216	
Q414	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q415	8-729-424-67	TRANSISTOR UN2216	
Q416	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q417	8-729-424-67	TRANSISTOR UN2216	
Q418	8-729-424-67	TRANSISTOR UN2216	
Q561	8-729-200-17	TRANSISTOR 2SA1091-O	
Q601	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q801	8-729-140-96	TRANSISTOR 2SD774-34	
Q802	8-729-016-32	TRANSISTOR 2SC4927-01	
Q821	8-729-018-99	TRANSISTOR 2SD2394-F	
Q902	8-729-421-19	TRANSISTOR UN2213	
Q903	8-729-421-19	TRANSISTOR UN2213	
Q1201	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1202	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1203	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1204	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1207	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1208	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1209	8-729-422-27	TRANSISTOR 2SD601A-Q	
Q1265	8-729-424-67	TRANSISTOR UN2216	
Q1513	8-729-422-27	TRANSISTOR 2SD601A-Q	
		<RESISTOR>	
R001	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R002	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R003	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R004	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R007	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R008	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R009	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R010	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R012	1-216-017-91	METAL GLAZE 47 5% 1/10W	
R013	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R014	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R015	1-216-043-91	METAL GLAZE 560 5% 1/10W	
R016	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R017	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R018	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R019	1-216-101-00	METAL GLAZE 150K 5% 1/10W	
R020	1-216-025-91	METAL GLAZE 100 5% 1/10W (KV-G25M11)	
R021	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R025	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R027	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R028	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R029	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R031	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R033	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R035	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R036	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R038	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R040	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R041	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R042	1-216-039-00	METAL GLAZE 390 5% 1/10W	
R045	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R047	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R048	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R053	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R054	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R057	1-216-049-91	METAL GLAZE 1K 5% 1/10W	
R060	1-216-037-00	METAL GLAZE 330 5% 1/10W	
R061	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R062	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R063	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
R065	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R066	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R067	1-216-033-00	METAL GLAZE 220 5% 1/10W	
R068	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R071	1-216-037-00	METAL GLAZE 330 5% 1/10W	
R076	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R077	1-216-025-91	METAL GLAZE 100 5% 1/10W	
R090	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
R101	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R102	1-216-049-91	METAL GLAZE 1K 5% 1/10W	

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REF. NO.	PART NO.	DESCRIPTION			REMARK
R113	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R114	1-216-041-00	METAL GLAZE	470	5%	1/10W
R115	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R116	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R117	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R118	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R119	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W
R120	1-216-109-00	METAL GLAZE	330K	5%	1/10W
R131	1-216-464-11	METAL OXIDE	18K	5%	2W F
R180	1-216-033-00	METAL GLAZE	220	5%	1/10W
R181	1-216-033-00	METAL GLAZE	220	5%	1/10W
R182	1-216-033-00	METAL GLAZE	220	5%	1/10W
R241	1-216-037-00	METAL GLAZE	330	5%	1/10W
R242	1-216-044-00	METAL GLAZE	620	5%	1/10W
R243	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R244	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R245	1-216-067-00	METAL GLAZE	5.6K	5%	1/10W
R248	1-216-063-91	METAL GLAZE	3.9K	5%	1/10W
R250	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R251	1-216-295-91	CONDUCTOR, CHIP			
R252	1-249-411-11	CARBON	330	5%	1/4W
R253	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R254	1-249-389-11	CARBON	4.7	5%	1/4W
R265	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R266	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R302	1-216-295-91	CONDUCTOR, CHIP			
R303	1-216-025-91	METAL GLAZE	100	5%	1/10W
R304	1-216-025-91	METAL GLAZE	100	5%	1/10W
R305	1-216-025-91	METAL GLAZE	100	5%	1/10W
R306	1-216-025-91	METAL GLAZE	100	5%	1/10W
R307	1-216-025-91	METAL GLAZE	100	5%	1/10W
R308	1-216-033-00	METAL GLAZE	220	5%	1/10W
R309	1-216-033-00	METAL GLAZE	220	5%	1/10W
R310	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R311	1-216-075-00	METAL GLAZE	12K	5%	1/10W
R312	1-216-025-91	METAL GLAZE	100	5%	1/10W
R313	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R314	1-216-295-91	CONDUCTOR, CHIP			
R315	1-216-295-91	CONDUCTOR, CHIP			
R318	1-216-099-00	METAL GLAZE	120K	5%	1/10W
R319	1-216-123-11	METAL GLAZE	1.2M	5%	1/10W
R320	1-216-083-00	METAL GLAZE	27K	5%	1/10W
R321	1-216-689-11	METAL CHIP	39K	0.50%	1/10W
R322	1-216-083-00	METAL GLAZE	27K	5%	1/10W
R325	1-216-037-00	METAL GLAZE	330	5%	1/10W
R326	1-216-039-00	METAL GLAZE	390	5%	1/10W
R327	1-216-029-00	METAL GLAZE	150	5%	1/10W (KV-G25M11)
R327	1-216-295-91	CONDUCTOR, CHIP (KV-G25M1)			
R328	1-216-029-00	METAL GLAZE	150	5%	1/10W (KV-G25M11)
R328	1-216-295-91	CONDUCTOR, CHIP (KV-G25M1)			
R329	1-216-029-00	METAL GLAZE	150	5%	1/10W (KV-G25M11)
R329	1-216-295-91	CONDUCTOR, CHIP (KV-G25M1)			
R330	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R331	1-216-115-00	METAL GLAZE	560K	5%	1/10W
R332	1-216-033-00	METAL GLAZE	220	5%	1/10W
R333	1-216-077-00	METAL GLAZE	15K	5%	1/10W
R335	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R336	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R338	1-216-295-91	CONDUCTOR, CHIP			
R339	1-216-036-00	METAL GLAZE	300	5%	1/10W (KV-G25M1)
R340	1-216-035-00	METAL GLAZE	270	5%	1/10W (KV-G25M1)
R341	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R342	1-216-036-00	METAL GLAZE	300	5%	1/10W (KV-G25M11)
R343	1-216-035-00	METAL GLAZE	270	5%	1/10W (KV-G25M11)

REF. NO.	PART NO.	DESCRIPTION			REMARK
R344	1-216-129-00	METAL GLAZE	2.2M	5%	1/10W
R351	1-216-001-00	METAL GLAZE	10	5%	1/10W
R355	1-216-001-00	METAL GLAZE	10	5%	1/10W
R356	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R360	1-208-291-11	METAL GLAZE	4.7M	5%	1/10W
R403	1-216-021-00	METAL GLAZE	68	5%	1/10W
R406	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R407	1-216-063-91	METAL GLAZE	3.9K	5%	1/10W
R408	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W
R409	1-216-025-91	METAL GLAZE	100	5%	1/10W
R410	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R411	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R412	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W
R413	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R414	1-216-041-00	METAL GLAZE	470	5%	1/10W
R415	1-216-033-00	METAL GLAZE	220	5%	1/10W
R416	1-216-033-00	METAL GLAZE	220	5%	1/10W
R417	1-216-033-00	METAL GLAZE	220	5%	1/10W
R418	1-216-045-00	METAL GLAZE	680	5%	1/10W
R419	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R420	1-216-039-00	METAL GLAZE	390	5%	1/10W
R421	1-216-033-00	METAL GLAZE	220	5%	1/10W
R422	1-216-027-00	METAL GLAZE	120	5%	1/10W
R423	1-216-029-00	METAL GLAZE	150	5%	1/10W
R424	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R425	1-216-039-00	METAL GLAZE	390	5%	1/10W
R426	1-216-029-00	METAL GLAZE	150	5%	1/10W
R427	1-216-037-00	METAL GLAZE	330	5%	1/10W
R428	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R429	1-216-039-00	METAL GLAZE	390	5%	1/10W
R430	1-216-041-00	METAL GLAZE	470	5%	1/10W
R431	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R432	1-216-041-00	METAL GLAZE	470	5%	1/10W
R433	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R434	1-216-041-00	METAL GLAZE	470	5%	1/10W
R435	1-216-041-00	METAL GLAZE	470	5%	1/10W
R436	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R437	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R440	1-216-029-00	METAL GLAZE	150	5%	1/10W
R521	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R552	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R553	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R554	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
R555	1-249-429-11	CARBON	10K	5%	1/4W
R556	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R557	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W
R560	1-216-295-91	CONDUCTOR, CHIP			
R561	1-249-421-11	CARBON	2.2K	5%	1/4W
R562	1-249-420-11	CARBON	1.8K	5%	1/4W F
R563	1-247-885-00	CARBON	180K	5%	1/4W
R564	1-216-091-00	METAL GLAZE	56K	5%	1/10W
R565	1-216-091-00	METAL GLAZE	56K	5%	1/10W
R566	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R569	1-247-883-00	CARBON	150K	5%	1/4W
R570	1-216-295-91	CONDUCTOR, CHIP			
R571	1-216-033-00	METAL GLAZE	220	5%	1/10W
R603	1-249-416-11	CARBON	820	5%	1/4W F
R604	1-249-416-11	CARBON	820	5%	1/4W F
R606	1-215-915-11	METAL OXIDE	470	5%	3W F
R610	1-215-924-00	METAL OXIDE	15K	5%	3W F
R611	1-202-933-61	FUSIBLE	0.1	10%	1/2W F
R612	1-219-134-11	FUSIBLE	0.1	10%	1/4W (KV-G25M11)
R612	1-249-377-11	CARBON	0.47	5%	1/4W F (KV-G25M1)
R613	1-219-134-11	FUSIBLE	0.1	10%	1/4W
R614	1-215-877-11	METAL OXIDE	22K	5%	1W F
R615	1-249-389-11	CARBON	4.7	5%	1/4W

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Les composants identifies par une trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The componants identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION			REMARK
R616	⚠1-218-265-91	METAL	8.2M	5%	1W
R617	1-215-924-00	METAL OXIDE	15K	5%	3W F
R618	1-219-134-11	FUSIBLE	0.1	10%	1/4W (KV-G25M11)
R619	1-219-134-11	FUSIBLE	0.1	10%	1/4W
R620	1-202-962-11	WIREWOUND	3.3	5%	10W
R622	1-217-191-21	WIREWOUND	0.18	10%	2W F
R623	1-247-807-31	CARBON	100	5%	1/4W
R624	1-215-881-11	METAL OXIDE	15	5%	2W F
R625	1-249-424-11	CARBON	3.9K	5%	1/4W
R626	1-249-420-11	CARBON	1.8K	5%	1/4W
R627	1-249-417-11	CARBON	1K	5%	1/4W
R628	1-249-417-11	CARBON	1K	5%	1/4W
R629	1-249-401-11	CARBON	47	5%	1/4W
R632	1-249-381-11	CARBON	1	5%	1/4W
R635	1-215-882-00	METAL OXIDE	22	5%	2W F (KV-G25M11)
R636	1-215-924-00	METAL OXIDE	15K	5%	3W F
R801	1-215-920-11	METAL OXIDE	3.3K	5%	3W F
R802	1-249-387-11	CARBON	3.3	5%	1/4W F
R803	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R804	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R805	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R809	1-247-756-11	CARBON	2.2K	5%	1/2W F
R811	1-216-346-00	METAL OXIDE	0.56	5%	1W F
R812	1-216-075-00	METAL GLAZE	12K	5%	1/10W
R816	1-249-437-11	CARBON	47K	5%	1/4W
R820	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W
R821	1-215-910-00	METAL OXIDE	68	5%	3W F
R822	1-216-429-00	METAL OXIDE	270	5%	1W F
R823	1-247-756-11	CARBON	2.2K	5%	1/2W F
R825	1-249-392-11	CARBON	8.2	5%	1/4W F
R826	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W
R827	1-216-097-91	METAL GLAZE	100K	5%	1/10W
R828	1-216-063-91	METAL GLAZE	3.9K	5%	1/10W
R829	1-216-053-00	METAL GLAZE	1.5K	5%	1/10W
R831	1-215-861-00	METAL OXIDE	47	5%	1W F
R832	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R834	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R851	1-249-382-11	CARBON	1.2	5%	1/4W F
R852	1-249-417-11	CARBON	1K	5%	1/4W F
R853	1-249-377-11	CARBON	0.47	5%	1/4W F
R854	1-249-377-11	CARBON	0.47	5%	1/4W F
R855	1-202-818-00	SOLID	1K	20%	1/2W
R856	1-249-431-11	CARBON	15K	5%	1/4W
R857	1-249-438-11	CARBON	56K	5%	1/4W
R858	1-216-370-11	METAL OXIDE	1.2	5%	2W F
R860	1-247-887-00	CARBON	220K	5%	1/4W
R881	1-216-043-91	METAL GLAZE	560	5%	1/10W
R882	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W
R883	1-216-121-91	METAL GLAZE	1M	5%	1/10W
R895	1-216-348-00	METAL OXIDE	0.82	5%	1W F
R898	1-249-421-11	CARBON	2.2K	5%	1/4W
R902	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R904	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R905	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R906	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R907	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W
R908	1-216-055-00	METAL GLAZE	1.8K	5%	1/10W
R909	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R910	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R911	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W
R913	1-216-041-00	METAL GLAZE	470	5%	1/10W
R914	1-216-041-00	METAL GLAZE	470	5%	1/10W
R915	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W
R1201	1-216-023-00	METAL GLAZE	82	5%	1/10W
R1202	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R1203	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R1205	1-216-023-00	METAL GLAZE	82	5%	1/10W
R1206	1-216-089-91	METAL GLAZE	47K	5%	1/10W
R1211	1-216-021-00	METAL GLAZE	68	5%	1/10W
R1212	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R1215	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R1216	1-216-113-00	METAL GLAZE	470K	5%	1/10W
R1218	1-216-041-00	METAL GLAZE	470	5%	1/10W
R1219	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R1220	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R1221	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R1227	1-216-689-11	METAL GLAZE	39K	5%	1/10W
R1228	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R1229	1-216-041-00	METAL GLAZE	470	5%	1/10W
R1230	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R1231	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R1232	1-216-063-91	METAL GLAZE	3.9K	5%	1/10W
R1233	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R1235	1-216-689-11	METAL GLAZE	39K	5%	1/10W
R1239	1-249-389-11	CARBON	4.7	5%	1/4W F
R1240	1-216-025-91	METAL GLAZE	100	5%	1/10W
R1241	1-216-049-91	METAL GLAZE	1K	5%	1/10W
R1243	1-216-025-91	METAL GLAZE	100	5%	1/10W
R1245	1-216-037-00	METAL GLAZE	330	5%	1/10W
R1246	1-216-037-00	METAL GLAZE	330	5%	1/10W
R1247	1-216-041-00	METAL GLAZE	470	5%	1/10W
R1248	1-216-051-00	METAL GLAZE	1.2K	5%	1/10W
R1249	1-216-041-00	METAL GLAZE	470	5%	1/10W
R1250	1-216-119-00	METAL GLAZE	820K	5%	1/10W
R1251	1-216-119-00	METAL GLAZE	820K	5%	1/10W
R1252	1-216-057-00	METAL GLAZE	2.2K	5%	1/10W
R1253	1-216-051-00	METAL GLAZE	1.2K	5%	1/10W
R1255	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R1513	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R1514	1-216-065-00	METAL GLAZE	4.7K	5%	1/10W
R1515	1-216-025-91	METAL GLAZE	100	5%	1/10W

<SWITCH>

S601	⚠1-571-433-31	SWITCH, PUSH (AC POWER)	
S801	1-572-707-11	SWITCH, LEVER	
S901	1-570-577-11	SWITCH, PUSH	
S902	1-570-577-11	SWITCH, PUSH	
S903	1-570-577-11	SWITCH, PUSH	
S904	1-570-577-11	SWITCH, PUSH	
S905	1-570-577-11	SWITCH, PUSH	

<SPARK GAP>

SG801	1-519-422-11	GAP, SPARK	

<FILTER>

SWF401	1-760-771-11	FILTER, SURFACE WAVE	

<TRANSFORMER>

T601	⚠1-429-139-21	TRANSFORMER, CONVERTER (SRT)	
T605	⚠1-424-461-11	TRANSFORMER, LINE FILTER	
T801	1-437-195-11	TRANSFORMER, HORIZONTAL DRIVE	
T851	⚠8-598-945-00	TRANSFORMER ASSY, FLYBACK	

<THERMISTOR>

THP601	⚠1-810-961-11	THERMISTOR, POSITIVE	

<TUNER>

TU101	⚠8-598-323-00	TUNER BT-AG401	

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REF. NO.	PART NO.	DESCRIPTION	REMARK
		<CRYSTAL>	
X101	1-577-358-21	VIBRATOR, CERAMIC	
X300	1-411-752-11	COIL	
X358	1-567-505-11	OSCILLATOR, CRYSTAL	
X443	1-567-504-11	OSCILLATOR, CRYSTAL	

SONY

SERVICE MANUAL

BG-1S CHASSIS

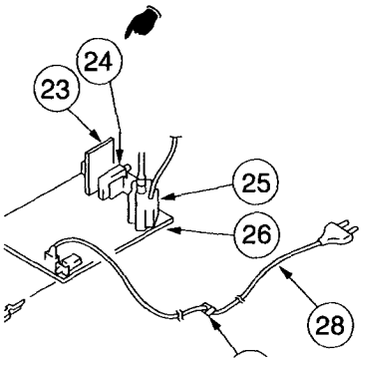
SUPPLEMENT

SUBJECT : PART CHANGE

File this supplement with the Service Manual.

EXPLODED VIEW

7–1. CHASSIS (see page 43, 44)



REF. NO.	PART NO.	DESCRIPTION	REMARK
24	8-598-323-30	TUNER, VSS BT-AG401	

MICROFILM